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An archeological reconnaissance survey of the Haig Point, Webb, and Oak Ridge tracts, Daufuskie Island, South Carolina

James L. Michie

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by

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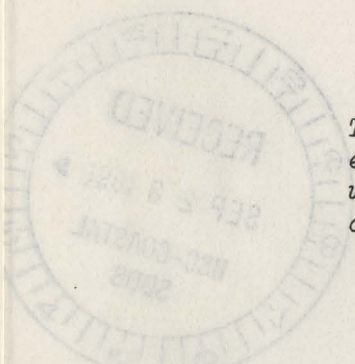

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ACKNOWLEDGMENTS

With a great deal of pleasure we acknowledge the efforts of Edward D. Stone, Jr., and Associates to insure the protection of cultural resources on Daufuskie Island. It is through such interest and understanding, as demonstrated by these gentlemen, that substantial advancements can be made towards understanding the heritage of South Carolina and the cultural systems that have operated in this state for the past twelve millennia. Among those many responsible for the project is David S. Armbruster, who has continued to work effectively and efficiently with everyone involved with the project; Charles Cauthen, who thoughtfully provided the crew with excellent living accommodations in the Haig Point Lighthouse and who cooperated fully with the goals of the project; Dr. Robert L. Stephenson, Director of the Institute of Archeology and Anthropology, who served as co-principal investigator and who provided his knowledge, cooperation, and expertise with the administration of the project.

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The photographs were prepared by Gordon H. Brown, Institute photographer, and the illustrations were prepared by Darby Erd. Thanks to Mary Joyce Burns for typing the manuscript and to Kenn Pinson, Lisa H. Walker, and Sylvia Wigfall for editing and preparing the report for print.

MANAGEMENT SUMMARY

In June 1982, the Institute of Archeology and Anthropology, University of South Carolina, contracted with Edward D. Stone, Jr., and Associates, for a reconnaissance survey of various tracts of property located on Daufuskie Island, South Carolina. With the knowledge that the island had been recently accepted to the National Register of Historic Places, the survey was designed to locate and identify additional cultural resources of early historic and prehistoric significance. This survey was initiated to protect and preserve these cultural resources that could potentially suffer irreparable damage through proposed construction activities.

The reconnaissance survey was conducted in July 1982, and included surface and subsurface investigations. The exposed surface soils, i.e., roadbeds, trails, paths, old cultivated fields, over-turned trees, and other disturbances, were visually inspected for cultural materials. Subsurface soils were investigated by testing in the immediate vicinity of observable structures, and by digging small holes at set intervals in selected areas. The soil from the test units was screened through one-quarter-inch hardware cloth. Additionally, the peripheral areas of the island were thoroughly inspected for evidence of shell middens and any other form of historic or prehistoric habitations. These various methods of investigation yielded a total of 54 archeological sites, and 34 of these were situated on tracts of land considered for future development.

For sites that appear potentially eligible for inclusion in the National Register of Historic Places, additional investigations on the Haig Point and Webb Tracts are recommended. The Oak-Ridge Tract failed to yield any evidence of historic or prehistoric occupations. In the Webb Tract the following sites should be investigated more fully: 38BU135, 38BU136, 38BU620, and 38BU615. For the Haig Point Tract, I have the following recommendations: 1) intensive testing at 38BU153, 38BU591, 38BU584, and at the complex of shell middens denoted as 38BU586, 38BU587, and 38BU588, and 2) expanded testing program east and west of the lighthouse. This program should include the area around tabby structures and the area between the tabbies and the lighthouse. To the east of the lighthouse, the testing should include the areas associated with sites 38BU634, 38BU627, 38BU628, 38BU590, 38BU629, 38BU630, and 38BU631. Testing would not necessarily incorporate all of these sites, but structures, shell middens, and other features would be closely examined. For example, it would be important to locate features associated with the tabby complex, such as privies, graves, and other activity areas.

The tabby structures and other features do not exist as a separate entity; rather, they are a part of a cultural system that is not easily observable without subsurface testing. It is important, therefore, that some attempt be made at identifying these features.

Three cemeteries were identified on the Webb and Haig Point tracts: Haig Point Cemetery-38BU592, Crypt Cemetery-38BU624, and Robert Bryan Cemetery-38BU619. Two of the cemeteries have observable stone markers. Depressions in the area suggest that other graves exist. If these depres-

sions are graves, then some sort of protection should be given to these locations. At the Haig Point Cemetery, protective measures should also be implemented to insure the safety of associated grave goods, i.e., intentionally deposited ceramics, bottles, and other personal items. A small testing program of slot trenches should be initiated to determine the presence or absence of graves at the Crypt Cemetery, or within the other cemeteries in the event of uncertainty.

ABBREVIATIONS

CCROPJW	Charleston County, Records of the Ordinary Probate Judge, Wills
CRROPJIAS	Charleston County, Records of the Ordinary Probabe Judge, Inventories, Appraisements, and Sales
MCASC/SLP/BD	Manuscript Census, Agriculture, South Carolina, St. Luke's Parish, Beaufort District
SCRSS/RAG/MB	South Carolina, Records of the Secretary of State, Records of the Auditor General, Memorial Book
NARG	National Archives Record Group

THE ENVIRONMENTAL SETTING OF DAUFUSKIE ISLAND

Physical Environment

Location

Daufuskie Island, composed of approximately 5,200 acres of sandy soils, lies in the coastal province of South Carolina within an environment of tidal creeks, flatlands of marsh, and areas of low topographic relief. The island, 5.0 miles long and 2.7 miles wide, is associated with the drainage systems of the Cooper River to the northwest, Calibogue Sound to the east, and the New River to the south. The eastern edge of the island faces Hilton Head Island, and the southern shore faces the Atlantic Ocean. The large expanse of saltmarsh that separates the island from the mainland has prevented the construction of a bridge, and consequently, boats are the only form of transportation to the island (Fig. 1).

Geology, Geomorphology, and Soils

The Coastal Plain of South Carolina extends from the Fall Line at Columbia to the coast, a distance of about 120 miles. This geographic province constitutes a thick wedge of sediments, beginning at the Fall Line and increasing to a depth of about 3,500 feet at the coast. The basal zone of this formation is represented by crystalline and metamorphic rocks that were formed some time prior to the pre-Cretaceous period. The sediments that overlay this basal unit of soils were deposited during various transgressions and regressions of the sea, which began with the late-Cretaceous and continued through the Pleistocene. Even during the Holocene, significant changes have occurred with the formation of barrier islands, deltas, and estuaries. Presently, change is a continuing process and is observable with beach attrition, dune ridges, and the modification of estuarine landforms (Colquhoun 1965, 1969; Cooke 1936; Michie 1980).

Within the region of Port Royal Sound, environmental change is reflected in the conspicuous land forms of the Pleistocene that have been altered by erosion and deposits during the Holocene. The silts and clays of the estuary, relative to the Holocene deposits and marshes, overlay eroded Pleistocene dune formations. The marsh constantly erodes, as do the peripheral areas of the islands and mainlands. Such changes are induced by local storms and cycles of tidal inundation, but have also been affected by the fluctuating sea levels over several millenia.

Beneath this thin mantle of Holocene and Pleistocene soils, earlier deposits of micaceous clays and sandstones, bioclastic lime muds, and thick deposits of limestone form deeper structural units associated with the Miocene and Eocene epochs (Colquhoun 1972).

The sandy elevated soils within the region of Port Royal Sound, like many other areas of the coast, are all related to the emergence of land forms during cycles of falling sea levels. Presumably, Daufuskie Island

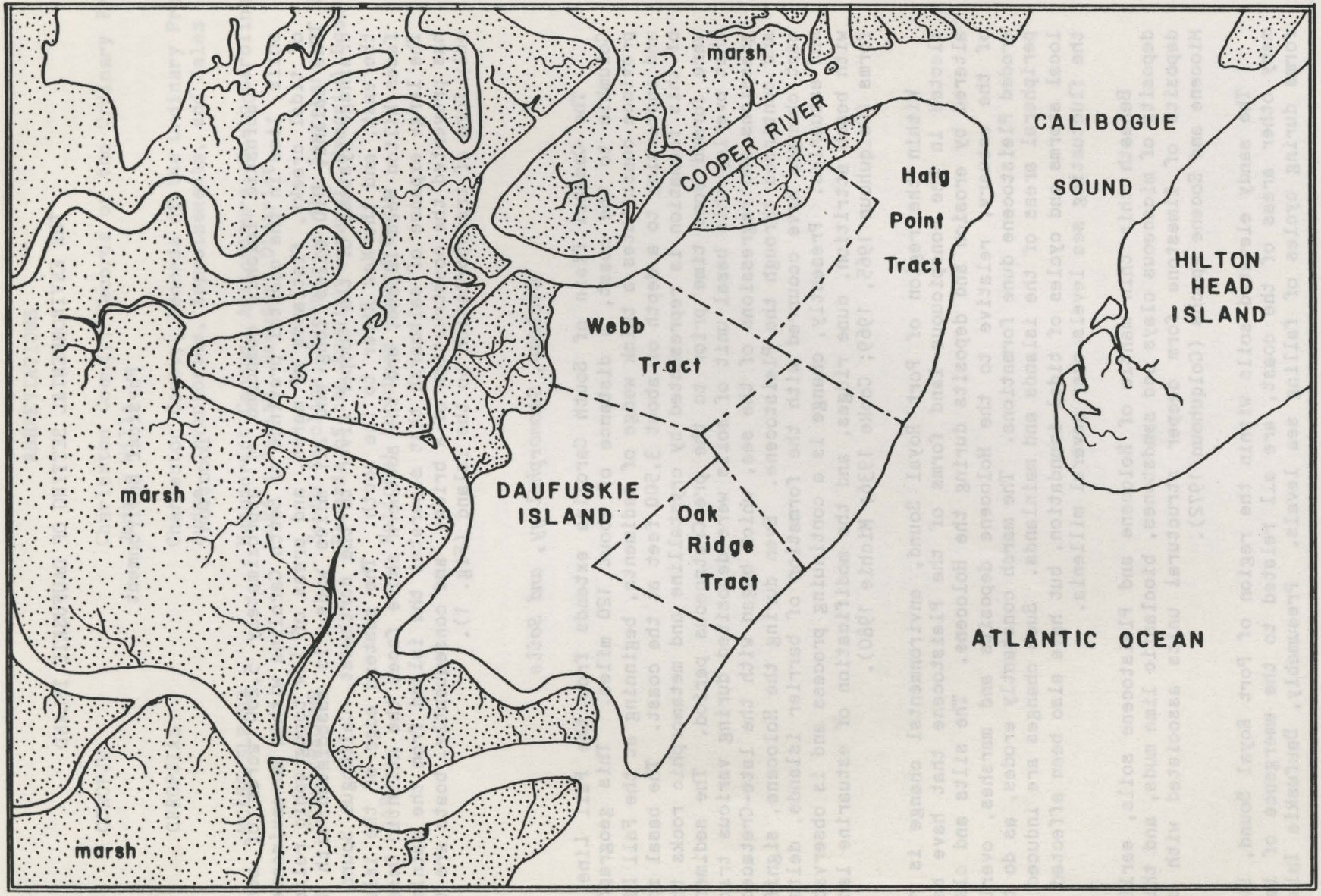


Figure 1. Daufuskie Island and surrounding landforms.

was formed during the late-Pleistocene as the sea was receding some 100,000 years ago (Colquhoun 1965, 1969; Kana and Hayes 1982).

Daufuskie is represented by an undulating topography of Pleistocene dune ridges, extensive salt marshes, and tidal creeks that meander from the contiguous estuarine rivers towards the elevated mainland of the island. The furrowed topography is characterized by long linear ridges and fresh water hardwood swamp forests, many of which extend nearly the length of the island. These ridges vary in elevation from about ten to twenty feet. Although there are a few elevations that exceed these averages, their occurrence is minimal, ranging from about twenty-one to twenty-five feet (U.S.G.S. maps; Edward D. Stone, Jr. maps).

The linear hardwood swamps and depressions comprise a relatively large area of the island and appear to be seasonally active in regard to water levels. During our reconnaissance survey, practically every depression contained large quantities of water, and it was not unusual to discover that roads and primitive trails were inundated, and at times, impassible. These depressions are elevated several feet above maximum tidal inundation, and many are associated with the freshwater table. These low areas are constantly wet, except during periods of extended droughts, and provide an environment for hydric plants (Fig. 2).

Beyond the linear depressions, large angular and oval-shaped ponds (freshwater marshes) occur occasionally throughout the island. These ponds also fluctuate seasonally and several have a depth of up to three feet. The majority of these ponds resembles shallow glades or water-oriented marshes, for they contain small flowering plants and grasses (Fig. 3).

The soils of the island are a mixture of various sands that exhibit different qualities of drainage and permeability (Stuck 1980). The lowlands are represented by three types of soil, all of which have drainage problems: Polawana, Rosedhu, and Yonges. These soils range from deep and poorly drained to very poorly drained. Permeability is rapid to moderate; however, the water table remains on or near the surface for six to eight months a year. Without sufficient modification and drainage, these soils have little value for cultivation or any other form of commercial utilization. They remain saturated with water and are flooded for extended periods of time. Attempts at draining these areas have been in progress for at least a century; however, the soils tend to remain inundated (Figs. 4 and 5).

The marsh-oriented soils that surround portions of the island are Bohicket, Capers, and Carolina Beach. The Bohicket series is composed mainly of silts and clays that precipitated from the contiguous rivers and creeks. The soils cover large expanses of the marsh and are exceptionally flat, poorly drained, and highly impermeable. These soils are also flooded daily with tidal inundation. Capers is usually found on the high marsh surface and represents eroded remnants of earlier land formations. While the Bohicket soils are too soft and boggy to support aboriginal occupations, the Capers was used occasionally for the deposition of shellfish remains and forms of material culture, such as pottery sherds. Carolina Beach is found on the eastern side of the island and represents a beach formation without dunes. The sand originates from excessive erosion of the

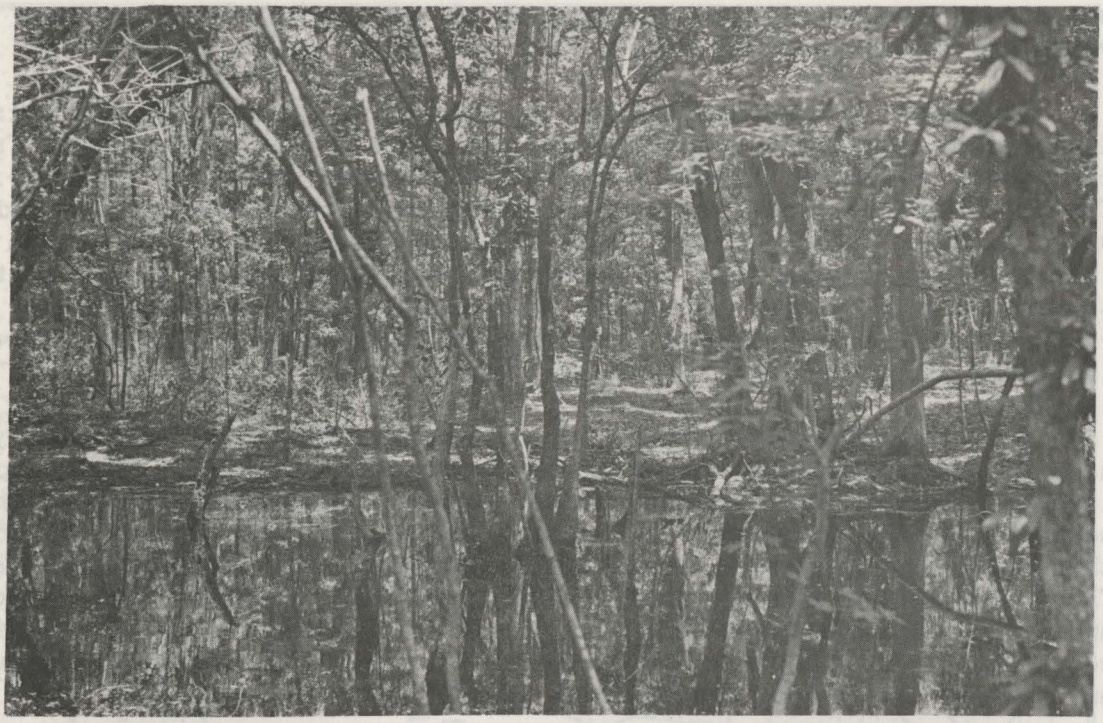


Figure 2. Linear hardwood swamp located in Haig Point Tract.

Figure 3. Freshwater marsh located near Union Baptist Church.

Figure 4. Drainage ditch in the Haig Point Tract.

Figure 5. Drainage ditch in Haig Point Tract. (Note live oak growing from mounded soil).

mainland for a distance of about three-and-a-half miles, beginning at the southern extent of the island. Elevated bluffs and rapid erosion preclude dune formation.

The upland environment and salt-marsh hummocks consist of five soils: Wando, Seabrook, Seewee, Baratari, and Ridgeland. These sandy soils appear to be equally represented and range from excessively drained to poorly drained, with permeability being rapid or moderately rapid. The majority of soil slope ranges from one to two percent except for Wando, which may slope six percent. In areas where the soils contact drainages, the slope generally increases (Fig. 6).

Hydrology

The marsh along the northern and western portions of the island is heavily dissected by numerous tidal drainages that represent narrow streams, creeks, and the Colleton River. The creeks and streams are usually navigable during periods of high tide, and the channels of the Cooper River, New River, and Calibogue Sound are sufficiently deep.

The tidal fluctuations of the Cooper River and its tributaries are influenced by Calibogue Sound. With the almost complete absence of fresh water discharge, Calibogue Sound and the Cooper River are highly saline. The New River that flows past the southern extent of the island is fed by fresh water originating from the Great Swamp in lower Jasper County, and watershed discharge is appreciable. However, as Stuck (1980) has commented, the fresh water is ineffectual because of the stream's low gradient. Presently, the effects of fresh water discharge and the penetration of salinity into the New River system is not fully known.

Within Port Royal Sound, the mean tidal range averages about seven-and-a-half feet. In the upper regions of the estuary, tidal fluctuation increases to about eight feet, and near the mouth with oceanic contact, the range is reduced to about seven feet. These ranges will vary with climatic and meteorological conditions. Tidal duration is approximately six and two-tenth hours for each rise and fall, thereby providing a tidal day of twenty-four and eight-tenth hours (Kilpatrick and Cummings 1972: 51-52; Baltzer 1972: 27). Regionally affiliated with Port Royal Sound, Calibogue Sound follows a similar pattern of tidal fluctuations.

Hydrological conditions within the interior of the island are affected by the water table and seasonal rainfall. If permanent ponds, capable of sustaining populations of ichthyic species (fish) exist, these ponds were not noted on Daufuskie. The fresh water marshes and hardwood swamps do provide reptilian and amphibian communities that provide support for avifauna and mammalian species.

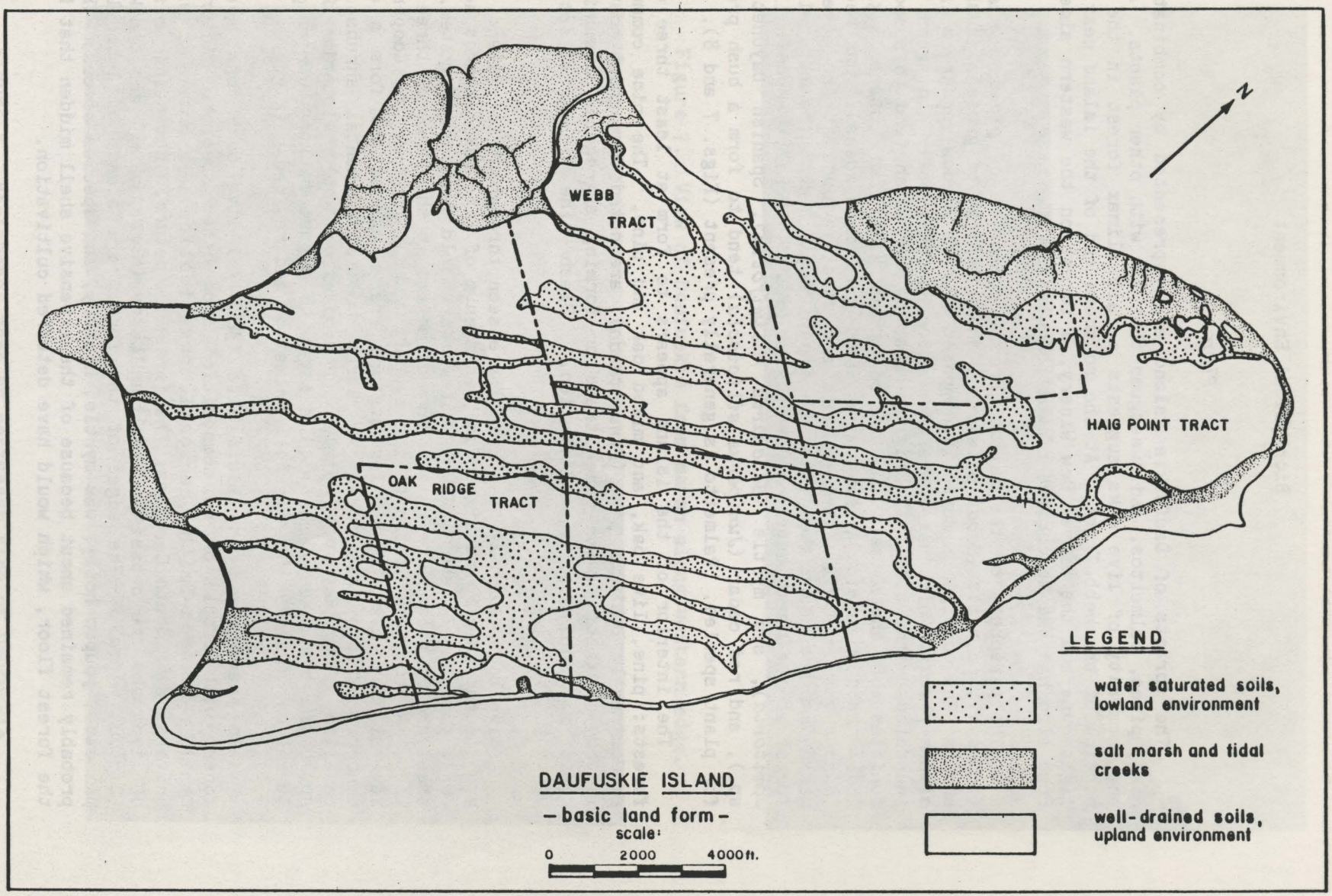


Figure 6. Basic land form of Daufuskie Island showing high and low topography.

Biophysical Environment

Flora

The forests of Daufuskie Island are represented by combinations of oaks, pines, palmettos, and sweetgums that mix with other plants. At least one community of live oaks suggests a full climax forest in the western portion of the Webb Tract. At the southern end of the island near the old lighthouse and the Silver Dew Winery, a forest on the western side of the road also has the appearance of full succession.

The periphery of the island forms a composite of pines (*Pinus*), oaks (*Quercus*), palmetto (*Sabal palmetto*), and a variety of grasses, bushes, and shrubs. The contiguous marsh is composed of salt meadow cordgrass (*Spartina alterniflora*), which has a preference for Bohicket soils and areas that are inundated by the tide. The higher areas of the marsh tend to support communities of short salt meadow cordgrass (*Spartina patens*), glasswort (*Salicornia virginica*), sea oxeye (*Borrichia frutescens*), and needlerush (*Juncus romerianus*). These plants are usually found at the edge of the marsh and are associated with the Capers soil. With the beginning of a forest at the marsh edge, wax myrtle (*Myrica cerifera*), yaupon holly (*Ilex vomitoria*), sea myrtle (*Baccharis halimifolia*), Spanish bayonet (*Yucca sp.*), and red cedar (*Juniperus silicicola*) tend to form a bush protection for plant species. Palmetto is generally present (Figs. 7 and 8).

The interior of the island appears to form at least three distinct forests: pine, live oak, and mixed oak and pine. The pine communities, predominantly loblolly pine (*Pinus taeda*), are noted throughout most of the island, coexisting with other trees or forming segregated communities of rapid succession after cultivation. Slash pine (*Pinus elliottii*) is present (Fig. 9).

Live oaks (*Quercus virginiana*) are seen throughout the island. In the area of the Haig Point Lighthouse, an avenue of live oaks extends northward for a distance of about 300 feet towards an old plantation system. These trees are relatively large and have diameters in the range of three to four feet. At the termination of the avenue, and in sight of the Cooper River, several live oaks of similar stature are clustered and form a dominant canopy. Within this forest of large trees, ornamental shrubs such as camellia (*Camellia sp.*), azalea (*Rhododendron sp.*), wisteria (*Wisteria sp.*), and boxwoods (*Buxus sp.*) exist with pignut hickory (*Carya glabra*), laurel oak (*Quercus laurifolia*), palmetto, and red cedar (Fig. 10).

In the area of the Bluff site (38BU135) live oaks form a dominant forest with little or no competition from other species. According to Cynthia Aulbach-Smith (personal communication), a botanist with the University of South Carolina, the forest is mature. Attending this growth of live oaks are occasional small mulberry (*Morus rubra*) and black walnut (*Juglans nigra*). The edges of the forest are stands of loblolly pine, palmetto, yaupon holly, wax myrtle, hickory, and species of oak. This area probably remained uncut because of the extensive shell midden that blankets the forest floor, which would have deterred cultivation.

Figure 7. View of Daufuskie from marsh along western edge.

Figure 8. Peripheral zone on northeast side of Daufuskie.

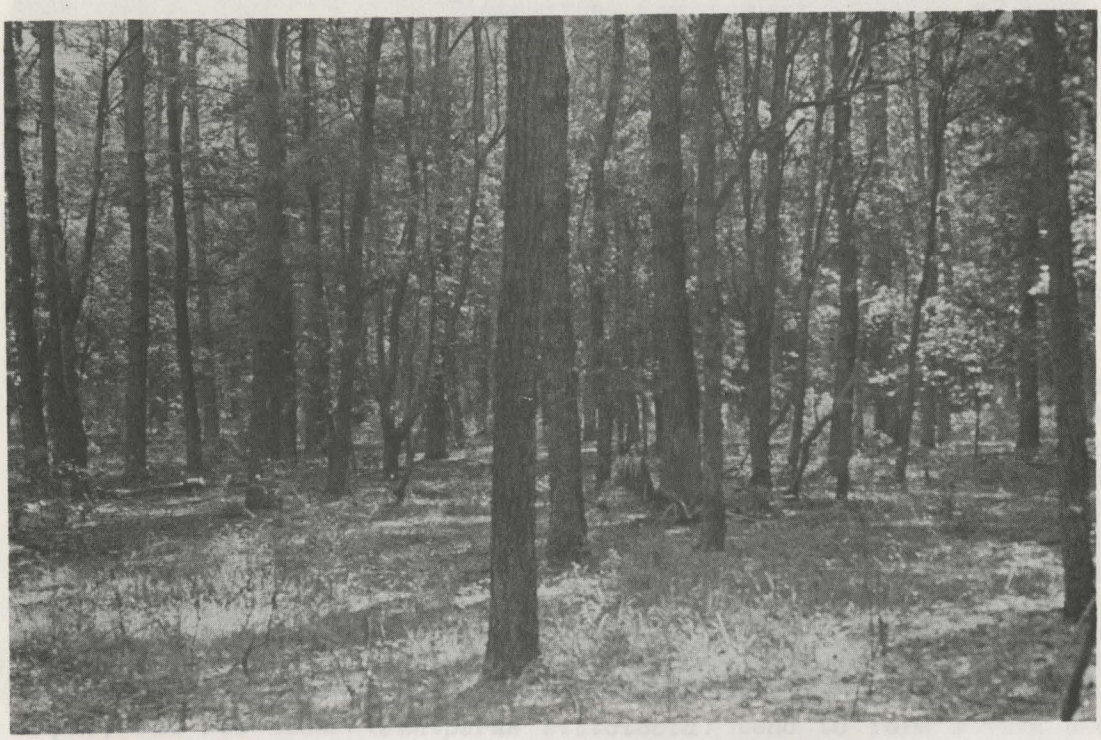


Figure 9. Small pines located near Union Baptist Church.

Figure 10. Relict live oak in the vicinity of Haig Point.

The composite of trees, although variable, would include pine, oak, magnolia, sweetgum (*Liquidamber styraciflua*), holly (*Ilex opaca*), hickory, palmetto, hackberry (*Celtis occidentalis*), and sassafras (*Sassafras albidum*). Vegetation on the forest floor consists of seedlings, grasses, and weeds.

The linear hardwood swamps that dissect the island exhibit a variety of hydric species. Water tupelo (*nyssa aquatica*) and red maple (*Acer rubrum*) appear frequently in stands of water, and are usually associated with sweetgum. Along the edges of the depressions, red bays (*Persea borbonia*), saw palmetto (*Serenoa repens*), fetterbush (*Lyonia lucida*), and great cane (*Arundinaria gigantea*) are seen along with ferns (*Filicineae*). Within the hardwood swamps, *Polygonum sp.* appears frequently.

The angular and oval-shaped ponds that are scattered across the island support dominant communities of long-bladed grass (*Panicum hemitomon*). Although many other plant species coexist in this environment, meadow beauty (*Rhexia sp.*), pennywort (*Hydrocotyle sp.*), beak rusle (*Rhynchospora spp.*), and nut rush (*Scleria reticularis*) were most conspicuous. Large vascular plants are absent in these ponds. This suggests that the fresh water marshes are seasonally flooded and that neither hydric nor mesic species can fully depend on the fluctuating water levels.

Fallow fields exhibit similarity in plant species and tend to support grasses, e.g., sweet grass (*Sporobolus indicus*), butterfly pea (*Centrosema virginianum*), dog fennel (*Eupatorium capillifolium*), *Galactia sp.*, wooly mullein (*Verbascum thapsus*), *Croton glandulosus*, and dandelion (*Taraxacum officinale*). Beyond these plants, broomstraw (*Andropogum virginicus*) and young pine, in addition to sweetgum and yucca, constitute prominent species in open areas.

Daufuskie Island is a composite of various floral communities relative to topography, environment, and plant succession. The majority of the island is represented by secondary forests that have grown out of fallow fields during the past fifty to eighty years. Although timbering operations at the turn of the century had an effect on the plant communities and on their succession from earlier periods of cultivation, the present-day forests, although comparatively young, probably represent plant species present on the island during the early historic and aboriginal occupations. The relict live oaks at the Bluff site and those in the immediate vicinity of the Haig Point Lighthouse exemplify, in part, earlier environmental conditions. The large magnolias, oaks, hickories, and other trees seen at the southern end of the island may well depict a local forest in its pristine condition.

Fauna

With the apparent loss of vegetational communities through cultivation some 50 to 150 years ago, the faunal species of the island were significantly reduced. Cultivation practices throughout most of the southeastern United States had a devastating effect on many mammalian species, especially the white-tailed deer (*Odocoileus virginianus*). However, following a program of restocking in the mid-1900s, and paired with the demise of

cultivation, the deer population began to rise substantially. The deer presently noted on Daufuskie probably resulted from emigration and successful repreduction within a succession of forests. Concomitantly, other mammalian species have had an opportunity to inhabit and utilize the resources of a relatively large forest that evolved since cultivation.

The terrestrial fauna and other environmentally sensitive species resulted from actual sightings, animal signs, and local informants. Based on this information, white-tailed deer inhabit practically every portion of the island, and appear in greater numbers in the northern section. Raccoon (*Procyon lotor*), squirrel (*Sciurus carolinensis*), and rats and mice (*Cricetidae*) are also present. Opossum (*Didelphis marsupialis*), rabbit (*Sylvilagus sp.*), otter (*Lutra canadensis*), fox (*Vulpes fulva*), skunk (*Mephitis mephitis*), and feral pig (*Sus scrofa*) occur with less frequency. The wildcat (*Lynx rufus*) is reportedly present. In addition to these animals, cows (*Bos tarus*) are present throughout most of the island and wander freely.

The predominant reptiles are snakes. The most frequent encounters involved black racers (*Columber constrictor*), but copperheads (*Agkistrodon contortrix*) were not infrequent. Common king snakes (*Lampropeltis getulus*), cottonmouths (*Agkistrodon piscivorus*), and common water snakes (*Natrix spp.*) were infrequently observed. Rattlesnakes (*Crotalis sp.*) are apparently present throughout much of the area, evidenced by an array of skins at the Mary Field School and photographs at the Daufuskie Island Store. However, the species was not observed during the survey.

Although the linear hardwood swamps and ponds could support alligators (*Alligator mississippiensis*), evidence for these large reptiles was minimal. The tracks of a relatively large alligator and those of a smaller one were observed near the Crypt Cemetery (38BU624), and local residents claim the presence of a moderately sized alligator in the large pond at the Union Baptist Church. Beyond these occurrences there was little evidence of alligators.

Similarly, turtles are apparently scarce. During the survey no turtles were seen in the terrestrial or marine environments of the interior. Although diamondback terrapins (*Malaclemys terrapin*) frequent the coastal islands, this species was never observed during the survey of the island's edge. The absence of turtles in the interior and the relative infrequency of alligators may attest to the seasonality of hardwood swamps and ponds, and the inability of these water sources to maintain aquatic communities of fish and other species necessary in the food chain.

Avifauna is considerably diversified and was observed in all environmental niches. Various species of birds were seen daily, especially doves (*Zenaidura carolinensis*), crows (*Corvus sp.*), vultures (*Carthes aura*), and swallows (*Hirundinidae*). Ospreys (*Pandion halioetus*) are not infrequent and several nests were seen. Readily identifiable species in the marsh include terns (*Sterninae*), gulls (*Larinae*), sandpipers (*Scolopacidae*), herons (*Ardeidae*), loons (*Gaviidae*), and ibis (*Ciconiidae*). Eagles (*Halioeetus leucocephalus*) are occasionally seen in the coastal areas but were not observed at Daufuskie.

Faunal species in the marsh are represented by frequent occurrences of oysters (*Crassostrea virginica*), periwinkles (*Littorina irrorata*), quahogs (*Mercenaria mercenaria*), and razor clams (*Ensis directus*). Knobbed whelks (*Busycon carica*) are occasionally seen among the oyster beds, while blue crabs (*Callinectus sapidus*) and fiddler crabs (*Uca pugnax*) are frequent residents of the marsh.

The faunal species inherent in Daufuskie Island are a result of those that have remained unmolested, such as the communities of the marsh, and those that have adjusted to the effects of cultivation and the regrowth of a maritime forest. The terrestrial fauna have not been static; rather they have been under the influence of man's interaction with the environment.

Considerations for a Paleoenvironment

During the last forty millennia the environment of South Carolina has been subjected to continuous change generated by fluctuating climatic conditions. The changing climate, accompanied with various sea levels, was influenced by glaciation. Unfortunately, the effect of glaciation on the physical environment is not thoroughly understood, and little is known about paleoenvironments. As Watts (1971: 676) has stated, the "vegetational history...of the Southeastern United States is poorly known," and Whitehead (1965: 416) agrees that, "comparatively little is known concerning Pleistocene vegetational and climatic changes in unglaciated eastern North America." A literature search for local paleobotanical information indicates that such studies in South Carolina are poorly represented, and as a result little is known about the ancient environments of South Carolina.

The paleobotanical studies by Watts and Whitehead deal with the accumulative sediments found in ponds and lakes, and in many instances these depositional records have marked hiatuses in the sequences of stratification. These geologic data were gathered from areas of Virginia, North Carolina, South Carolina, Georgia, and Florida, that when combined formed a general picture of climatic and vegetational history of the Southeast. Although many other studies are required for specific and localized environments, the research does provide a format of vegetational change through the past 40,000 years (Table 1).

While there are problems in palynological and sea level studies, some conclusions can be drawn. During the height of glaciation, about 17,000 years ago, sea level had dropped more than 100 meters, thereby exposing vast areas of the continental shelf that extended river channels across a newly developed Coastal Plain some 240 km wide. Following a period of glacial intensity, the Wisconsin glaciers began to retreat northward. Subsequently, sea level rose as water was released from the melting glaciers. During the first several thousand years the rise was relatively rapid, averaging about 80 cm per 100 years. By 8,000 to 9,000 years ago, the rate of continental submergence had decreased and transgression was reduced to about three centimeters every 100 years. Rising sea level was not a steady, uninterrupted inundation of the Coastal Plain, but a fluctuating rise, producing transgressive and regressive phases that yield eustatic curves (Fairbanks 1961: 556) (Fig. 11).

TABLE 1

VEGETATIONAL HISTORY OF SOUTH CAROLINA
(After Watts 1970, 1971; Whitehead 1965,1973)

TIME (B.P.)	AGE	VEGETATION	CLIMATE
40,000	Sangamon	Oak/hickory forests, abundance of pine, presence of cypress, sweetgum, etc.	warm trend
35,000			
30,000		Climate and forest changing	
25,000		Northern forest begin to appear	cooling
20,000	Wisconsin full-glacial	Semi-boreal, open forests with jack pine and spruce, oak/ hickory percentages low and occuring in alluvial flood plains. Cypress disappearing.	maximum glaciation
15,000		Appearance of beech, alder and hemlock forests	
10,000	Holocene	Climate and forest changing	warning
		Oak and hickory appear	
5,000		Oak and hickory reappear in high percentages. Pine abundant also cypress and sweetgum. Emergence of present-day forests.	warm trend

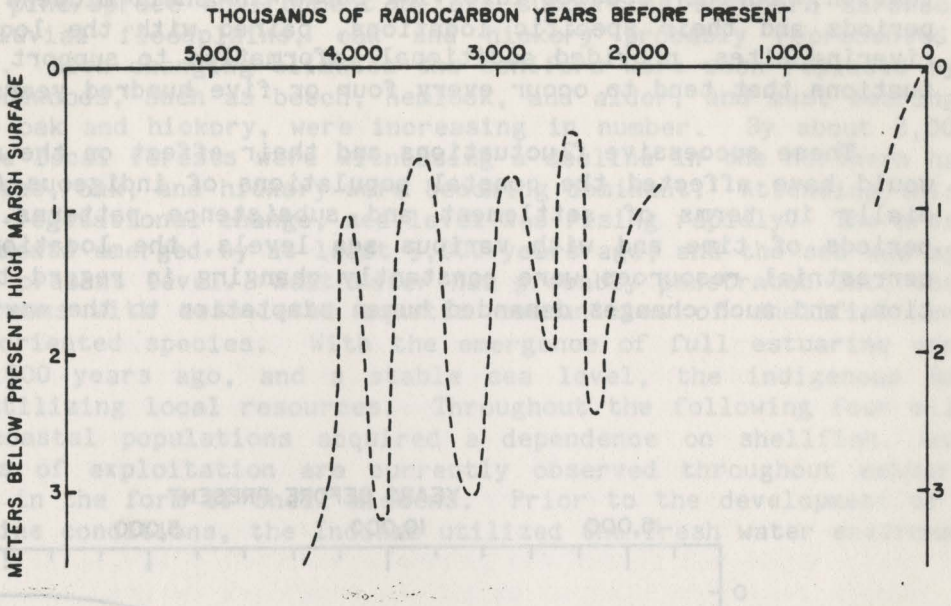


Figure 11. Eustatic sea level curve based on submarine and glacial morphology, including radiocarbon dating. (After Fairbridge 1961).

Recent research conducted in South Carolina and Georgia has indicated that significant environmental change and sea level fluctuations have occurred during the last four millennia and have affected the estuaries. Michie (1973) reported an inundated shell midden in Port Royal Sound that is flooded daily with nearly five feet of sea water, and DePratter (1977) has demonstrated that a significant fluctuation occurred from about 3,100 to 2,500 years ago. This information is also based on buried archeological sites on the leeward edge of barrier islands on the Georgia coast. The presence of specific pottery types of known age were discovered beneath late Holocene marsh peats, silts, and clays, and the radiometric dating of buried and associated tree stumps provided the parameters of time. The buried sites indicated that sea level had peaked and remained relatively constant at an elevation of about one to two meters below present sea level. For several hundred years, the elevation apparently remained stable, but by 3,050 B.P., the sea was dropping, and by 2,750 B.P., the receding waters had reached an elevation about three to four meters below the present elevation. For a short period of time the sea remained low, but by 2,550 B.P., it was rising and probably attained an elevation not very different from the present by about 2,300 years B. P. (DePratter 1977).

Evidence for multiple fluctuations during the past 4,500 years is reported by Brooks et al. (1979) and Colquhoun et al. (1981). This evidence is based on geological data obtained from marsh facies and the macro

flora and fauna that exist in stratified marsh sediments. These combined data indicate both transgressive and regressive phases of sea level fluctuation. Further studies involving estuarine shell middens of various time periods and their specific locations, paired with the location of interriverine sites, provided additional information to support sea level fluctuations that tend to occur every four or five hundred years (Fig. 12).

These successive fluctuations and their effect on the marine ecosystem would have affected the coastal populations of indigeous Americans, especially in terms of settlement and subsistence patterns. At different periods of time and with various sea levels, the location of marine and terrestrial resources were constantly changing in regard to spatial position, and such changes demanded human adaptation to the environment.

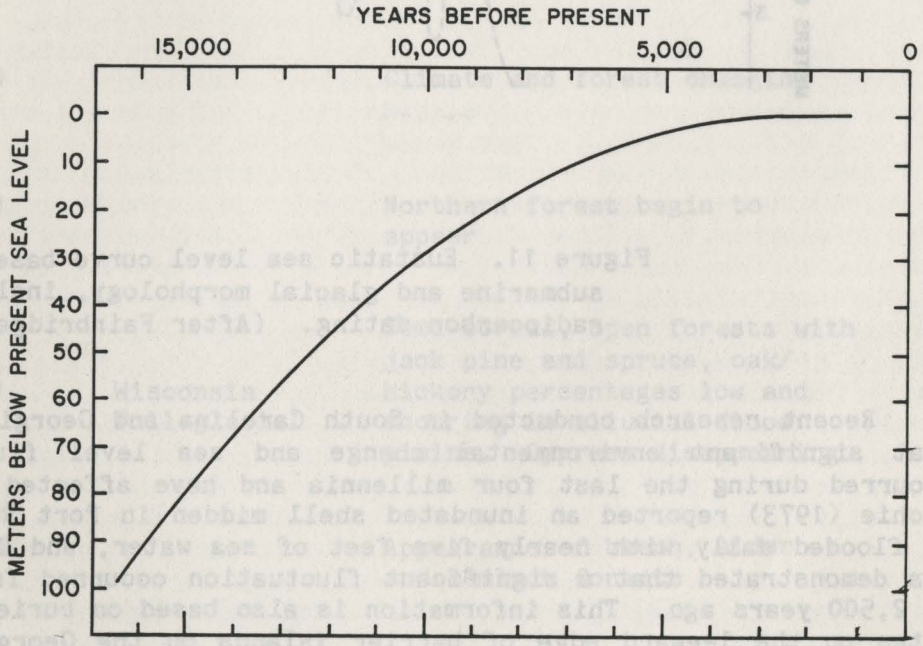
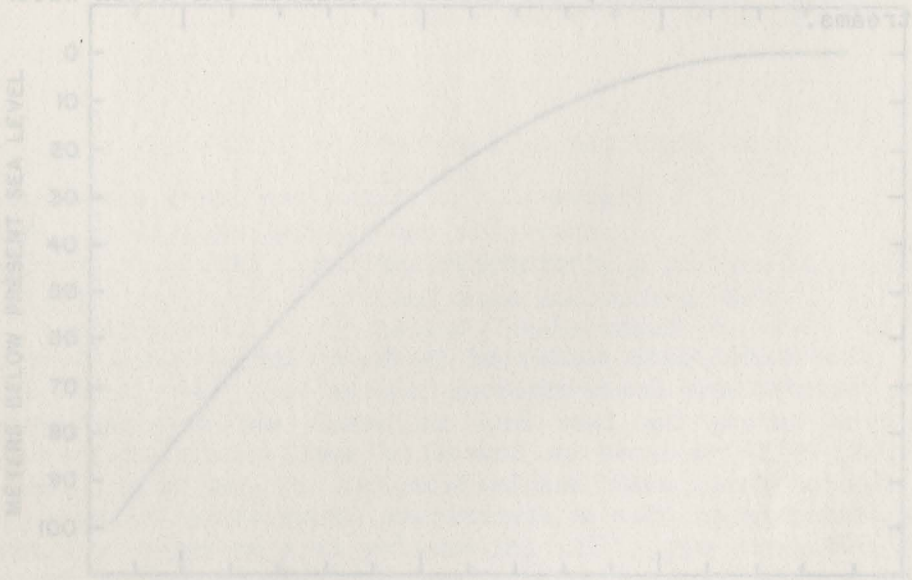


Figure 12. Proposed sea level fluctuations based on geological and archeological information, and radiocarbon dates.

Prior to 10,000 years ago, the area of Port Royal Sound and the Broad River represented an active river valley fed by the confluence of the Coosawhatchie and Pocotaligo rivers. The associated drainage systems, such as the Colleton and the Beaufort rivers, probably served as tributaries in the form of fresh water streams. Similarly, the New River and Calibogue Sound probably functioned as tributaries of the Savannnah River. During the early Holocene, Daufuskie Island was a portion of the Coastal Plain and potentially a hinterland environment situated between two streams meander-

ing in small valleys. The ocean was located perhaps 50 to 100 miles away from its present position, and the vegetational communities were changing from a pine/spruce environment to one supporting northern hardwoods. In the alluvial floodplains, oak and hickory probably represented galley forests. With changing climates the conifers were soon replaced by deciduous hardwoods, such as beech, hemlock, and alder, and mast bearing trees, such as oak and hickory, were increasing in number. By about 8,000 years ago, the local forests were witnessing a decline in the northern hardwoods while pine, oak, and hickory were becoming dominant. Attending this climatic and vegetational change, sea level was rising rapidly. The present-day environments emerged by at least 5,000 years ago, and the sea was approaching its present level. Salt water had probably penetrated into the rivers and streams with associated aquatic communities of shellfish and other marine-oriented species. With the emergence of full estuarine conditions some 4,500 years ago, and a stable sea level, the indigenous Americans began utilizing local resources. Throughout the following four millennia, these coastal populations acquired a dependence on shellfish, and their patterns of exploitation are currently observed throughout estuaries and marshes in the form of shell middens. Prior to the development of marshes and saline conditions, the Indians utilized the fresh water environments of streams.



AN ARCHEOLOGICAL OVERVIEW OF SOUTH CAROLINA PREHISTORY WITH AN EMPHASIS ON THE LOWER COASTAL PLAIN

Paleo-Indian Period

Some time prior to the tenth millennium B.C., nomadic hunters entered what is now South Carolina, and other areas of the southeastern United States, with an economy oriented towards the exploitation of now extinct megafauna. In all probability, these early hunters exploited other game, such as the white-tailed deer, and utilized plant resources. In South Carolina the evidence for early hunters is demonstrated by the presence of fluted projectile points that tend to occur in many of the various geographical provinces, i.e., Piedmont, Fall Line, and the Coastal Plain. While these points are found over most of the state, the greatest occurrence involves the lower fringes of the Piedmont and the Coastal Plain. Settlement patterns and land utilization, based on distributional studies (Michie 1977), would indicate a strong preference for major river valleys, large creeks, and an avoidance of rugged terrain and areas of high physiographic relief. Areas of the present-day coastline, e.g., Bluffton, Charleston, and Beaufort, have also yielded these early point types. However, the sea was considerably lower and the points were not associated with the coast during their abandonment.

Although South Carolina has failed to produce positive evidence of subsistence patterns in regard to the exploitation of megafauna, a coastal site located near Myrtle Beach has recently yielded the remains of a juvenile mastodon tenuously associated with stone tools (Michie 1976; Wright 1976). The site is buried beneath eight feet of sandy Holocene sediments in a moist matrix of peats, and was discovered during the dredging of a small creek. The mastodon bones, in addition to other mammalian and reptilian remains, were first noted in the back-dirt of the drag-line operation. A search for additional bones produced a heavily battered hammerstone and a large flake-like implement, both of which were covered with black peats. Subsequent geological studies indicate the fossil-bearing matrix formed as the result of a shallow pond during the last of the Pleistocene, some 11,000 years ago. Although the mammalian remains and the stone tools were not discovered in context, their association with Pleistocene deposited peats would argue for potential contemporaneity.

A similar situation in central Florida was also noted by Hoffman (n.d.). Beneath approximately eight feet of marl and river-deposited sediments, and immediately adjacent to the flow of the Silver Springs River, Hoffman discovered the remains of two juvenile mammoths directly associated with chert debitage and a Suwannee point. Both geological and botanical analysis of the soils indicated the animals had died in a shallow pond within a floodplain.

The exploitation of proboscidea is recorded at several localities in the American Southwest, and the general pattern indicates that the animals were dispatched in moist, wet environments such as creeks and ponds. Mam-

moths were not the only apparent victims of hunters. Other mammalian species such as horse, tapir, camel, sloth, and bison were also taken from the Late Pleistocene environments (Wormington 1957).

While there is evidence to suggest that Early Man entered the New World prior to 20,000 to 30,000 years ago (Bryan 1978), there are no indications of his presence in South Carolina before 12,000 years ago. In fact, there is no evidence in the Southeast to corroborate ancient occupations on the magnitude of those suspected in the western United States.

When the early hunters entered South Carolina during the Pleistocene/Holocene periods, the state was much cooler and supported a forest of spruce and jack pine that was beginning to change to northern hardwoods. With climatic and environmental changes the megafauna began to dwindle in numbers and soon became extinct. Subsequent to these changes, the behavioral patterns and lithic industries of the Paleo-Indian became modified. As the Holocene emerged, a new cultural tradition appeared as the Archaic (Table 2).

Archaic Period

By at least the eighth millennium B.C., the Pleistocene glaciers were retreating into Canada, and environmental conditions were significantly different. The semiboreal forests had disappeared and were replaced by northern hardwoods. With increasing climatic changes during the centuries, the present-day forests began to emerge by at least 5,000 years ago. During these environmental changes, the Archaic period was also witnessing a change in settlement, subsistence, and technology in order to contend with major variables, such as population growth and environmental change.

The Archaic represents a relatively long period of time that is subdivided into at least three cultural and technological stages: the Early, Middle, and Late. The Early Archaic is a technological expression of the earlier Paleo-Indian, but with a change in subsistence strategies. Characterized by the Dalton, Palmer, and Kirk series of bifacial implements (knives/projectile points) (Coe 1964), and specialized tool assemblages composed of endscrapers, burins, gravers, and blades, this segment of the Archaic lasted from approximately 8500-6000 B.C. Subsistence was apparently directed towards the specialized hunting of white-tailed deer, as indicated by the high incidence of deer bones in the lower levels of Stanfield-Worley (DeJarnette 1962) and Russel Cave (Weigel et al. 1974). By the end of the Early Archaic, lithic technologies were changing and new biface and tool types began to emerge. The Stanley and Morrow Mountain bifaces, along with the Guilford (Coe 1964), serve as temporal indicators for the Middle Archaic, which lasted from about 6000-3000 B.C. During this period of time people were using more forest resources, while maintaining a primary dependence on white-tailed deer. Instead of congregating along the edges of major river valleys, people began to exploit the resources of the interriverine forests. By at least 3000 B.C., technologies had changed to include the Savannah River Archaic biface as a new tool type (Coe 1964), while subsistence systems were beginning to include shellfish as a dietary supplement. During this time, dramatic shifts in population density and

TABLE 2

A CULTURAL SEQUENCE FOR HUMAN OCCUPATION
IN THE LOWER COASTAL PLAIN OF SOUTH CAROLINA

CHRONOLOGY	CULTURAL SEQUENCE	SUBSISTENCE	TRENDS
9,000 B.C.	Paleo-Indian	Specialized hunting and gathering	Increase in sedentism, population, and technology
	Early Archaic		
6,000			
	Middle Archaic	Hunting and gathering	
3,000			
2,000	Late Archaic	Shellfish extraction Hunting and gathering	
1,000	Early Woodland	Hunting and gathering, beginning of horticulture	
500			
0	Middle Woodland	Hunting and gathering with horticulture	
500 A.D.			
1,000	South Appalachian	Cultivation of specific crops with continued hunting and gathering	
1700	Historic	Agriculture	
1980	Present	Industrial	

resource exploitation occurred, especially along the area of the Savannah River and the coastal islands that were developing as a result of rising sea levels.

In the Savannah River valley, shell middens such as Stalling's Island (Claflin 1931), Groton Plantation (Stoltman 1974), and the Bilbo Site (Williams 1968) demonstrate a heavy dependence on mollusks and a more sedentary life. The coastal areas of South Carolina and Georgia display large shell rings and middens composed primarily of oyster shells that date to the final stages of the Archaic and the beginning of the Woodland period (Marrinan 1975; DePratter 1976; Trinkley 1980). Lithic technologies were moving away from the Savannah River biface, and began to include smaller stemmed bifaces. Concomitantly, the utilization of steatite began to appear, along with the inclusion of ground stone tools. A further expansion of technologies is reflected in the appearance of socketed antler projectile points, bone pins, and other material possessions manufactured from bone and antler. Quite possibly these items were rooted in the earlier periods of the Archaic, but unfortunately the acidic soils of non-shell midden sites do not preserve perishable items.

In addition to the above innovations, pottery began to appear along the coast in association with shell middens by at least 2000 B.C. This pottery, commonly referred to as fiber-tempered, is the earliest known ceramic in North America. Shortly after its appearance, a sand-tempered variety also emerged, and both types apparently coexist in a context of Archaic lithic and bone technologies. For this reason, Crusoe (1974) suggested an Archaic affiliation, while Trinkley (1980) proposed Woodland affinities. The Archaic was rapidly diminishing by 1500 B.C. with the production of pottery, the introduction of specific cultigens, and a new lifeway.

Woodland Period

The Woodland period, which lasted from about 1500 B.C. to A.D. 700, is characterized technologically by the production of pottery, the manufacture of small triangular projectile points, smoking pipes, the bow and arrow, the construction of burial mounds, permanent structures, and the cultivation of plant foods (Willey 1966). Hunting and gathering continued as a subsistence base, but the development of cultigens supplemented the Indians' diet. The cultigens, in addition to structures and shell midden deposits, provide evidence of increased population and sedentation. Cultigens noted in the eastern United States would include squash, bean, sunflower, sumpweed, maygrass, *Iva annua*, gourd, corn, and *Chenopodium* (Ford 1978). Presently, however, these plant remains have not been discovered in an archeological context in South Carolina. This does not necessarily indicate their absence. While charred corncobs are known to exist in some of the Mississippian components of the state, it is not known to exist during the Woodland period.

The ceramics of the Woodland period are characterized by forms of size, shape, temper, and decorative motifs, while projectile points become increasingly smaller and more delicately manufactured. Pottery is recognized through time and space with specific tempering agents such as sand,

shell, and sherds, while the surface decorations are represented by cord-marking, fabric impressions, net impressions, check stamping, stamping with a carved paddle, simple stamping, and occasional burnishing and plain. During the Late Archaic/Early Woodland periods, decorations involved punctations and pinched designs (Trinkley 1980; Williams 1968).

Shell middens along the coast exhibit pottery sherds from all phases of the Woodland. Many of the middens indicate that only specialized activities were being performed at specific loci, e.g., shucking of shellfish, while other middens would tend to argue for a diversity of activities, including extended occupations (Trinkley 1980; Michie 1979).

In many ways the Woodland period was an extension of the Archaic, especially in terms of subsistence and settlement strategies. Although technologies were changing to adapt to sedentation, the population still relied heavily on the forest and stream for sustenance (Spencer and Jennings 1965). Shellfish and cultigens were substitutes, perhaps, for a system otherwise oriented towards an Archaic subsistence pattern.

Mississippian Period

The Mississippian period, also known as the South Appalachian Mississippian regional complex in the Southeast (Ferguson 1971), began approximately A.D. 700, and terminated with the emigration of Europeans to the New World during the 17th and 18th centuries (Willey 1966). This period is generally characterized by the construction of large, truncated temple mounds frequently associated with a complex of smaller burial mounds. Subsistence strategies were geared towards an increased utilization of cultigens, especially corn, supplemented by beans and squash. Hunting and fishing, in addition to the gathering of wild plant foods, provided other forms of sustenance. Settlements were generally associated with large, nutrient rich bottomland environments capable of yielding a high return of cultivated crops. With its temple mounds, and a large scale shift towards cultivation, this cultural period represents a complex social/political and religious system with a marked degree of sedentation (Willey 1966).

The bow and arrow and small triangular projectile points continued to be developed, while ceramic vessels became increasingly larger and were accompanied by a change in surface decoration. These vessels apparently were used for a variety of activities that included cooking, storage, and the interment of human remains. Although surface decorations were usually complicated stamped with arrangements of circles or rectangles, other motifs included applied clay nodes near the rim and reed punctations. Incising was also used, while plain, burnished vessels also existed. The clay was tempered with a variety of elements which include sand, shell, and occasionally fibers (South 1976).

Population appears to have increased significantly, as evidenced by large villages and a dramatic increase in the production of cultivated crops, due in large part to a movement away from an egalitarian society to a complex, stratified society, exemplified by chiefs and priests.

The Mississippian period in South Carolina, with its roots embedded in the traditions of the Mississippi Valley, collapsed soon after its introduction to Europeans, who continued to migrate to the Atlantic coastal states. Within a few decades the aboriginal people had suffered excessively from disease and economic exploitation. By the mid-18th century the indigenous Americans and their cultural systems had practically disappeared.

Historic Period

As early as 1520, the Spanish were sailing the Carolina coast in search of potential lands suitable for settlement. The first effort to colonize the area was made by Lucas Vasquez de Allyon in 1526. The small colony was located in the vicinity of latitude 33 degrees. The settlement soon failed because of summer fevers and severe winters (Savage 1956: 32-35; Wright 1976: 30). In 1540, Hernandes de Soto traversed the Carolina interior. Crossing the Savannah River near Silver Bluff, and moving eastward, he arrived at one of the major tributaries of the Santee River, if not the Santee itself. De Soto turned north towards the Blue Ridge Mountains into Tennessee (Savage 1956: 36).

By 1565, the Spanish had considerable influence in Florida, and they pushed up the coast, establishing and maintaining additional colonies. As a result, Pedro Menendez de Aviles established Fort San Felipe and the town of Santa Elena at Port Royal Sound on Parris Island. The settlement lasted for twenty-one years with an exception of a one-year withdrawal due to Indian hostilities during which the town was burned. Returning after this attack, the Spanish remained until 1587. The Spanish withdrew because of an English raid by Sir Francis Drake through the Carribean in 1586. Too few in number to defend the outlying territories, the Spanish retreated into the relative security of present-day Florida (Wright 1976; South 1979).

Concurrent with the 16th century ambitions for settlement, the French also made attempts at colonization in the coastal areas. Jean Ribaut and a group of Huguenots attempted a small settlement at Port Royal Sound in 1562, but after several months of poor management, the colony disbanded. There is also evidence to suggest that a French fortification was constructed near the mouth of the Edisto River in the 1570s, but it too was abandoned (Wright 1976: 31-35). Nearly a century after the unsuccessful attempts at colonization by the French and Spanish, a small English colony under a charter granted to the Lords and Proprietors established a settlement at Albermarle Point near the present city of Charleston. These new settlers were inexperienced in methods of cultivation, and subsequently depended upon the indigeous Americans for major food supplies. Subsistence farming, however, was later incorporated into a steadily growing economy to include deerskins, fur, and timber (Wright 1976: 46). During the earlier years, tens of thousands of deerskins were shipped to England, in addition to pitch, tar, rosin, and turpentine, materials that were necessary for the construction and maintenance of English ships.

The utility of the growing colony was quickly realized by England, and trade with the Indians and colonists soon flourished and reached relatively large proportions. In the latter part of the 17th century, rice production

became an important crop, and by 1700, the coastal area was shipping 300 tons a year to England (Wright 1976: 73). Because rice production required considerable acreage, people began spreading out from Charles Towne to acquire large tracts of select bottomlands. The inland swamps near the coast were ideal for the cultivation of rice because these lowlands provided fertile soils and an abundance of water, while the areas required only a minimal amount of clearing. Although some rice cultivation occurred in the interior along major river systems, the coastal areas were preferred. This important money crop lasted for nearly two hundred years but the increasing occurrence of floods and coastal hurricanes wrought havoc on the crop, and growers were brought to the edge of economic ruin (Wright 1976: 73-74).

As a competing crop, indigo was being shipped to England in large quantities in the mid-1700s. Developed during the beginning of the 1740s, it had reached an enormous level of production by 1750. Unlike its competitor, rice, the indigo plants could be adapted to many varying environments, which included the upland areas of the coastal plain. Free from floods, the crop continued in popularity. With an overproduction of rice during England's war with Spain and France, and a reluctance to export the product, indigo gained a firm hold on the Carolina economy. The production of this product for clothing dye remained steadfast until the invention of the cotton gin in 1791 (Wright 1976: 79-80).

From their inception at the beginning of the 18th century, plantations represented a minority of the population. Although some planters may have received large acreage through arbitrary means of Royal Grants, "it is said that generally only families with influence, who could get grants from the Royal governor of the province, came into possession of these (valuable rice) lands; some of the grants contained thousands of acres" (Cook 1926: 80). The great landowners of the mid-18th century had become prosperous, especially in terms of rice, indigo, and forest products, and this prosperity coincided with slave labor. The small farmers, without large tracts of land, political influence, or slave holdings, failed to compete with their wealthy contemporaries. As a result, the small farmers moved inland and away from the area of Charles Towne (Wright 1976: 80).

Attending this movement out of Charles Towne, people moved north and south along the coastal areas seeking rich and fertile soils for cultivation. This early migration, which took place shortly after the establishment of Charles Towne in 1670, led to the development of several coastal towns. Among those early towns were Beaufort in 1711, and Georgetown by at least 1730. Encouraged by free land under the land grant system, people began acquiring properties for investment, in addition to agricultural utilization.

Historical Background of Daufuskie Island

This, and possibly any, attempt at establishing a precise historical reconstruction of settlement and land use on Daufuskie Island has two major drawbacks. The first and most important is the relative lack of available documentary information on the area. This problem is the result not only of a fire in 1868 which destroyed many of the records of Beaufort County,

but also is the result of Daufuskie Island's geographic isolation from major transportation and communication networks.

The second problem, which is particular to this study, is that this investigation represents only a cursory examination of the potentially available documents. A total of six days was devoted to examining collections at the South Carolina Department of Archives and History in Columbia, the South Caroliniana Library at the University of South Carolina, the South Carolina Historical Society in Charleston, the Savannah Historical Society in Savannah and the Beaufort County Courthouse for documentation pertaining to Daufuskie Island. Although this search did not reveal a wealth of data, it did indicate that many small, but vital, pieces of information are available, which may be eventually molded into a history of the area. The following section presents the results of this preliminary study. It focuses primarily on the Haig's Point tract since this area offers the most complete reconstruction of past events in the area. It is intended not as a final statement on the subject, but as a background for thee assessment of archeological site potential which will follow.

Early History of Daufuskie Island

Daufuskie Island, which is an Indian word for "place of blood," alledgedly takes its name from an incident during the Yemassee War in which a group of marauding Indians were driven to the southern end of the island and massacred (Neuffer 1958: 18). A lone survivor of the massacre apparently escaped death by swimming to nearby Tybee Island. The southern tip of the island has retained the name Bloody Point to the present time in remembrance of that event (Neuffer 1964: 37).

Little is known of the colonial period occupation of the island. Daufuskie Island was originally granted to John Mungin in 1740. Mungin apparently established a plantation in the Bloody Point area, but the exact nature of the occupation was not determined during this study. By 1772, at least five individuals owned property on Daufuskie Island. This is indicated by a memorial to George Haig which refers to other land claims and grants in the area (SCSS/RAG/MB/11: 389).

This memorial grants to George Haig 352 acres of land on the "point of Daufuskie Island" as a surplus of 500 acres originally granted to Archibald Neale sometime around 1736-1737 (SCSS/RAG/MB/11: 389). Haig had attended the University of Edinburgh to study medicine but never received a degree. In South Carolina, he owned and operated two plantations in Saxe Gotha township that he inherited from his father. In addition, he operated three additional plantations in St. Paul's Parish that he attained through marriage. The latter plantations had a combined slave population of 161. Haig also had a residence in Charleston where he maintained 15 additional slaves (Edgar and Bailey 1977: 299).

Although the nature of Haig's ownership of Daufuskie property is unknown, it seems most likely that this property was purchased as an investment and that Haig did not maintain a plantation there. Neither Haig's will nor inventory indicates any dwellings, slaves or personal property on

the island (CCROPJW/ 1790/23: 702-705; CCROPJIAS/1790/B:410-414). Haig died in 1790 at his plantation on the Stono River and left the land on Daufuskie to his son, George (Jervey 1950: 243; CCROPJW/1790/23: 702-705).

Nineteenth Century Ownership of the Haig's Point Property

It is uncertain as to the disposition of the Haig's Point property following the death of George Haig. Because the younger George was under age, the property was probably held in trust until he reached 21 years of age. Regardless of the series of events, the next documented owner of the lands was David John Mungin, whose family maintained a plantation at Bloody Point on Daufuskie (NARG 26/Statefile, S.C. #9). At his death in 1823, the heirs of Mungin sold the property to the Reverend Herman M. Bladgett. Bladgett apparently sold the property to William Pope, a wealthy planter from Hilton Head, in 1850.

Pope and his heirs held the property until at least 1872, except for a two year period (1865-1866), when the property was held by the United States Tax Commission for unpaid taxes. In 1866, J. J. Pope paid the taxes and reclaimed the land for the heirs of William Pope (NARG 26/Statefile, S.C. #9). After the turn of the century, the Haig's Point tract had a series of owners, including the present corporation, which has scheduled the area for development.

Changing Patterns of Land Use on Daufuskie Island

The economic and social development of Daufuskie Island has experienced a series of fluctuations. These changes have manifested themselves in the visible landscape of the island, as each change initiated a new and different land use strategy. Further, the succession of various strategies has resulted in the selection and retention of numerous elements of the landscape, while other elements may have been obliterated by subsequent occupations (Sauer 1963).

Although extensive information is lacking, the available documentation indicates that most of the Daufuskie property was unoccupied during the colonial period. The data indicate that most of the property owners on Daufuskie were wealthy landowners who resided at other plantations in the province. Absentee ownership is also suggested by the demographic data from the cemeteries on the island, which associate the earliest burial with the 1790s. In addition, those settlements which are present on Daufuskie at this time are located on the southern end of the island within close proximity of Savannah.

During the nineteeth century, several plantation settlements were expanded or established on Daufuskie Island. A plat from 1860 shows four plantations on the island (Fig. 13). Three of the settlements (Dunn, Stoddard, and Mungin) are located at the southern end of the island, outside the present project boundaries. The remaining plantation, belonging

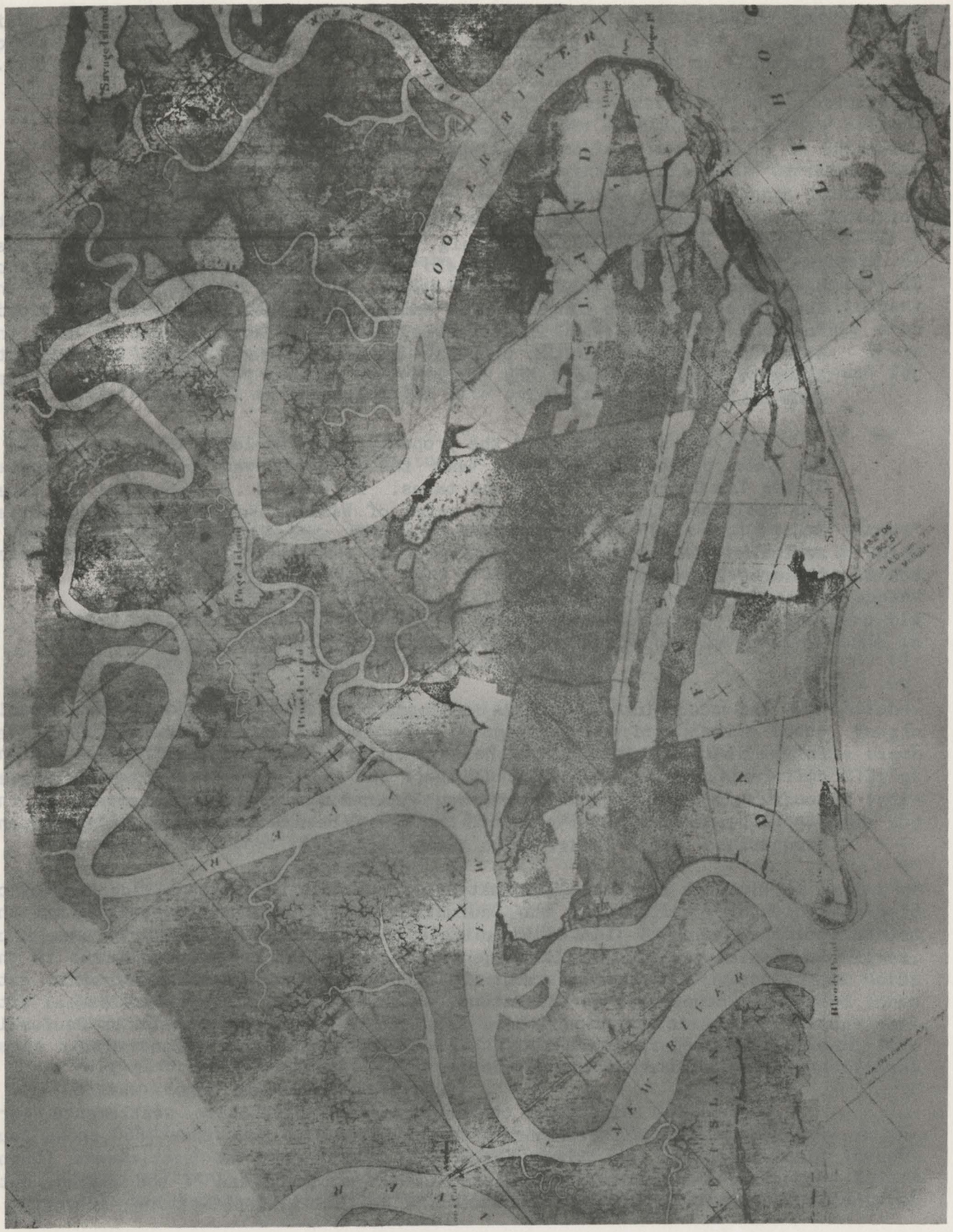


Figure 13. Plat of Daufuskie Island in 1860.

to William Pope, is located at the Haig's Point tract. This plat clearly illustrates the complex spatial nature of the plantation settlement with a large number of associated outbuildings extending over a major portion of the Haig's Point area.

In 1822, Jeremiah Evarts visited the sea-island cotton plantation of Mr. Mungin at Daufuskie (Evarts 1822: 16-18). Although Mr. Evarts does not mention specifics of land use on the island, his account does provide some valuable insights into the social conditions existing on the plantations. Evarts describes the condition of the slaves as always lacking for the essentials. While the planters feast three times daily on various meats, the slaves rarely tasted meat except on Christmas and special occasions (Evarts 1822: 18-19).

The economic viability of the Haig's Point Plantation is evidenced by the 1850 agricultural census of William Pope, owner of the property. Among the materials listed in the census are corn, sweet potatoes, peas and beans, and cotton, with substantial numbers of cattle, swine, and sheep (MCASC/SLP/BD/BD/1850: 307-308). The census also lists the production totals of Mary Dunn, John Mungin, and John Stoddard, all of whom own plantations on Daufuskie (MCASC/SLP/BD/1850: 309-310). These data indicate similar products and production levels (per improved acre) for the four plantations on Daufuskie Island (Table 3). It should be noted, however, that the census data for Mungin, Pope, and probably Stoddard include materials produced at other plantations and do not reflect the true economic viability of the Daufuskie lands. The census data for 1860 indicates a similarity in the types and percentages of crops grown within each plantation (Table 4).

Following the war, the economic development of Daufuskie Island declined dramatically. Many of the plantation lands were divided among the former slaves. Settlement patterns "exploded" as the former slaved moved away from the centralizing influence of the big house and plantation settlement (Prunty 1955). The result of this movement was a more dispersed population along the road system existing on the island (Fig. 14).

In addition, the field patterns changed from the focus on the big field with gang labor to more individualized single family plots (Prunty 1955). Small farming and timbering became the major economic activity of the area. A visitor's account after the war indicated that any whites that once lived there were no longer in residence on the island (Summers 1977: 63).

During the 1940s and 1950s Daufuskie Island once again became economically productive. By 1945 the population of the island had grown to over 1000, as the oyster industry flourished in the area. Settlement was concentrated in the southwestern end of the island with two smaller clusters of houses along the middle portion of the island. Most of the former farmlands had disappeared with the possible exception of several small subsistence plots (Billie Burn 1982: personal communication) (Fig. 15). By 1955, pollution from the Savannah River had destroyed the oyster industry. This marked 25 years of emigrations from the area until the population reached

TABLE 3

1850 AGRICULTURAL CENSUS FOR RESIDENTS
OF DAUFUSKIE ISLAND, SOUTH CAROLINA

	William Pope				Mary Dunn	John Mungin	John Stoddard	
	I	II	III	IV			I	II
Acres (improved)	550	450	450	130	200	1000	368	500
Acres (unimproved)	150	150	300	250	-	3000	20	300
Horses	8	10	6	-	2	8	4	15
Mules	3	1	1	-	-	8	2	-
Milk Cows	20	22	25	15	6	50	8	20
Working Oxen	6	0	-	-	2	-	4	-
Other Cattle	35	45	70	25	15	130	30	60
Sheep	-	60	20	45	-	5	9	-
Swine	45	40	60	12	3	-	-	-
Corn (bu)	800	1000	600	300	100	5000	700	1300
Cotton (400 lbs/bl)	25	21	19	9	8	-	16	29
Wool	-	-	50	100	-	200	-	-
Peas and Beans (bu)	50	200	-	300	300	200	200	50
Irish Potatoes (bu)	-	-	-	-	-	-	-	-
Sweet Potatoes (bu)	800	1000	800	200	220	400	650	450
Butter (lbs)	300	350	300	100	75	350	150	312
Rice (lbs)	-	2760	2300	2300	-	-	-	-

TABLE 4

1860 AGRICULTURAL CENSUS FOR RESIDENTS
OF DAUFUSKIE ISLAND, SOUTH CAROLINA

	William Pope	Mary Dunn	Isabella Mungin	John Stoddard
Acres (improved)	3000	275	200	1000
Acres (unimproved)	2100	25	250	5700
Horses	15	1	-	10
Mules	7	1	2	7
Milk Cows	40	22	20	60
Working Oxen	4	-	-	-
Other Cattle	120	24	10	75
Sheep	60	-	30	-
Swine	30	5	-	-
Corn (bu)	2000	350	300	1500
Cotton (400 lbs/bl)	87	10	-	40
Wool	200	-	-	-
Peas and Beans (bu)	300	50	-	10
Irish Potatoes (bu)	20	-	-	-
Sweet Potatoes (bu)	2000	280	-	1000
Butter (lbs)	30	250	-	-
Rice (lbs)	-	-	-	-
Hay (tons)	10	1.5	-	7
Honey (lbs)	-	80	-	-

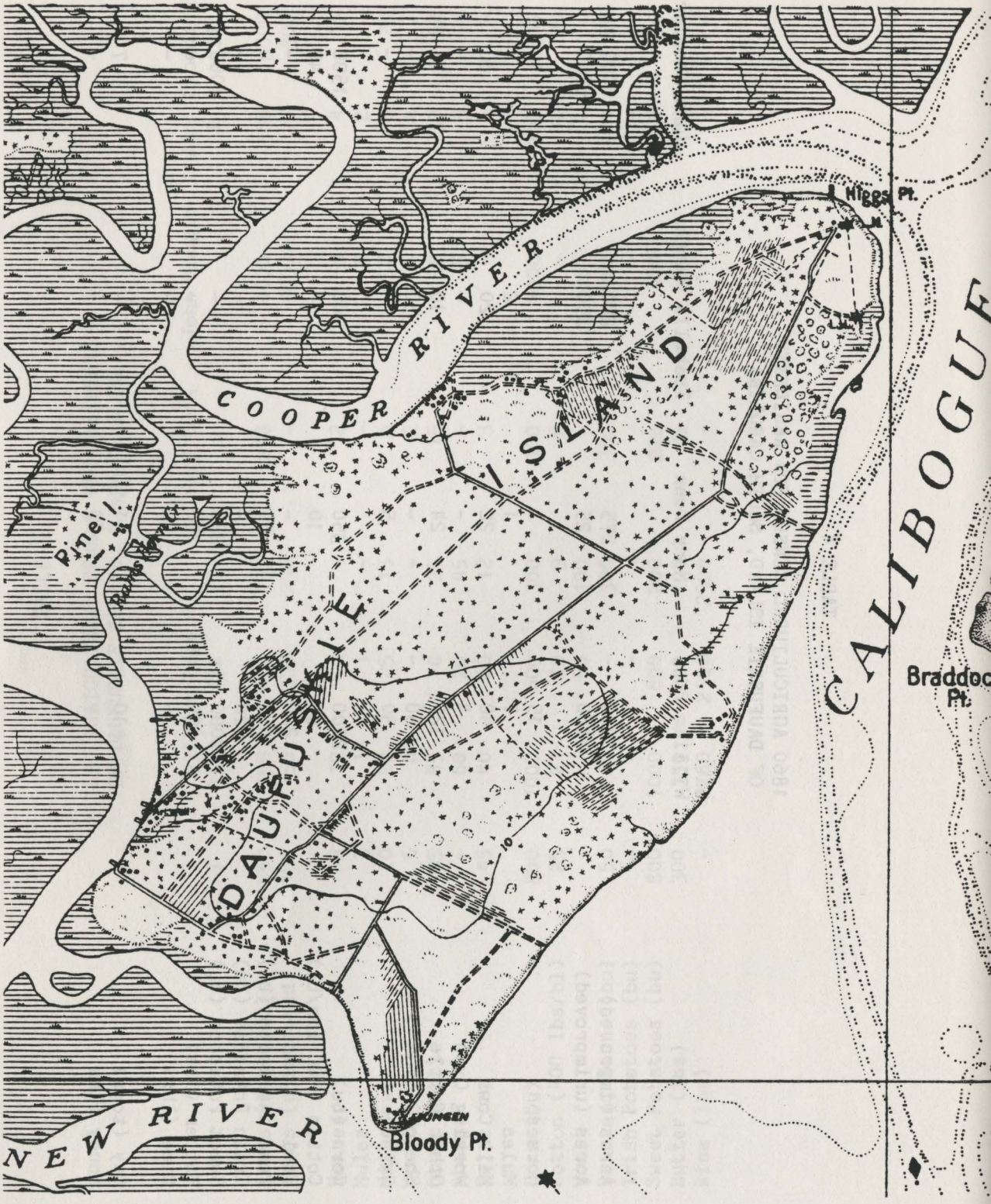


Figure 14. Map of Daufuskie Island, 1920 U.S.G.S., showing limited settlement.

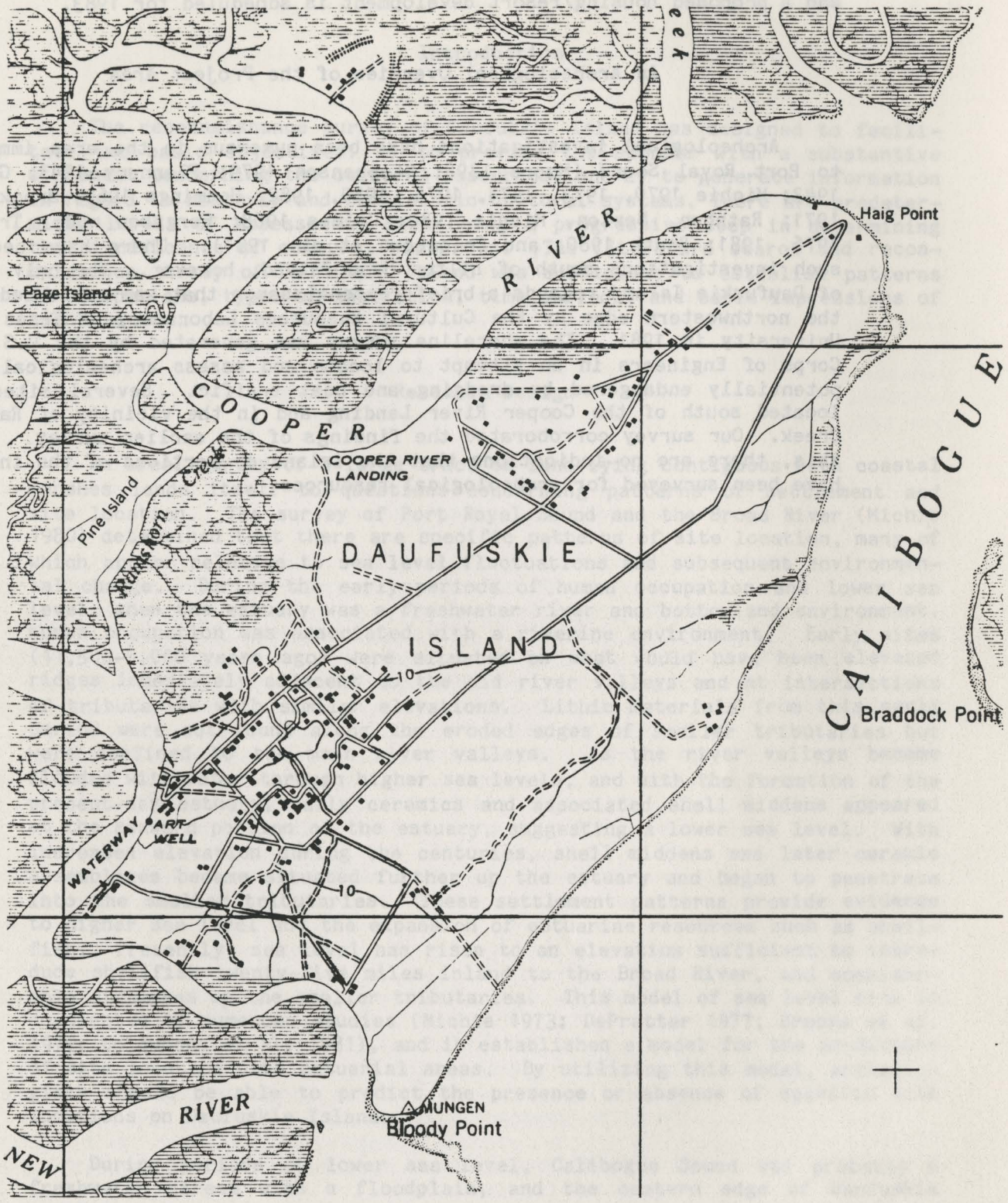


Figure 15. Map of Daufuskie Island, 1945, U.S.G.S., showing greatest population density.

reached its present number of approximately 60 to 70 persons. Approximately 2400 acres of the island have been purchased by a development corporation and a proposed housing/resort development is scheduled for 1983.

An Archeological Overview of the Project Area

Archeological investigations have been numerous in the area immediate to Port Royal Sound (Moore 1898; Stephenson 1979; Flannery 1943; Griffin 1943; Michie 1970, 1973, 1974, 1976, 1980, 1982; Hemmings 1969; Brockington 1971; Rathbun, Sexton, Michie 1980; Calmes 1968; Ferguson n.d.; Trinkley 1976, 1981; South 1980; and Colquhoun et al. 1981). There have been few such investigations south of Hilton Head Island, however. The only survey of Daufuskie Island regards a brief reconnaissance that was conducted along the northwestern edge by the Cultural Resources Laboratory of Texas A & M University in 1981. The shoreline survey was generated by the U.S. Army Corps of Engineers in an attempt to locate and assess archeological sites potentially endangered by dredging and boat traffic. Several sites were located south of the Cooper River Landing and in the vicinity of Ramshorn Creek. Our survey corroborated the findings of the earlier survey. Beyond this, there are no indications that the island or portions of the interior have been surveyed for archeological resources.

RESEARCH OBJECTIVES

Introduction

The reconnaissance survey of Daufuskie Island was designed to facilitate two basic objectives: 1) to provide the sponsor with a substantive statement concerning the cultural resources, and 2) to generate information in regard to historic and prehistoric cultural systems. There are predetermined levels of assessment, each being a progressive step in determining the significance of cultural resources. The literature search and reconnaissance survey of Daufuskie Island was sufficient to establish patterns of occupations, types of habitation, time periods, and basic impressions of significance.

Research Design

An areal survey of a large tract of land lying contiguous with coastal marshes lends itself to questions concerning patterns of settlement and site location. The survey of Port Royal Sound and the Broad River (Michie 1980) determined that there are specific patterns of site location, many of which appear relative to sea level fluctuations and subsequent environmental change. During the early periods of human occupation and lower sea level, when the estuary was a freshwater river and bottomland environment, human occupation was associated with a riverine environment. Early sites (11,500-5,000 years ago) were situated on what would have been elevated ridges immediately adjacent to the old river valleys and at intersections of tributaries with similar elevations. Lithic materials from this early period were not found along the eroded edges of smaller tributaries but were confined to the main river valleys. As the river valleys became flooded with water through higher sea levels, and with the formation of the present-day estuary, early ceramics and associated shell middens appeared at the seaward portion of the estuary, suggesting a lower sea level. With increased elevation during the centuries, shell middens and later ceramic assemblages became situated further up the estuary and began to penetrate into the smaller tributaries. These settlement patterns provide evidence to higher sea level and the expansion of estuarine resources such as shellfish. Presently, sea level has risen to an elevation sufficient to introduce shellfish twenty-five miles inland to the Broad River, and considerable distances up the smaller tributaries. This model of sea level rise is documented by numerous studies (Michie 1973; DePratter 1977; Brooks et al. 1979; Colquhoun et al. 1981), and it establishes a model for the prediction of site location with estuarial areas. By utilizing this model, archeologists should be able to predict the presence or absence of specific site locations on Daufuskie Island.

During periods of lower sea level, Calibogue Sound was probably a freshwater stream with a floodplain, and the eastern edge of Daufuskie would have been a strategic location for hunters and gatherers utilizing the resources of a riverine environment. Conditions would favor the exploi-

tation of ichthyic species, while the bottomland would have provided optimal deer browse. The sandy upland environment of an unfolding oak/hickory forest community would have provided additional browse for deer and a considerable amount of hickory nuts and acorns for the indigenous Americans during the Paleo-Indian and Archaic periods (11,500-5,000 B.P.).

Prior to 4,000 B.P., salt water invaded the area that is now known as Calibogue Sound and flooded a freshwater drainage system. As a result, the New River and Cooper River became saline, and extensive marsh systems developed in areas of low topographic relief. Shellfish communities penetrated into the relatively stable system of tidal flow and nutrient rich soils.

Based on the knowledge of ocean elevations during the last ten millennia, and the subsequent effects of rising sea levels, certain hypotheses concerning site location can be set forth in general statements:

H-1) Occupational sites from the Paleo-Indian to the Archaic periods should be located along the eastern side of Daufuskie Island contiguous with Calibogue Sound.

H-2) Shell middens from the early Woodland period, i.e., fiber-tempered, Thom's Creek, and Refuge, should be present at locations associated with the marsh.

H-3) Shell middens and associated ceramics of the later Woodland periods should also be present in any area associated with the marsh.

The surveys of Port Royal Sound and the Broad River (Michie 1980), Callawassie Island (Michie 1982), and Pinckney Island (Drucker and Anthony 1980) indicated that many shell middens are located on elevated land forms immediately adjacent to the marsh, navigable streams, open bodies of water, and small tidal creeks that offer passage during tidal inundation. Most sites are found along the edges of marsh hummocks, the peripheral zones of larger islands, and on the mainland. Areas and land forms that are generally inaccessible failed to yield evidence of shell middens.

On the Georgia coast, McMichael (1977) determined through random sampling that sites are located along areas with natural features rather than scattered across the island. Most sites occur along the edges in areas of high elevation.

The conclusions parallel patterns of site location and establish additional predictions and hypotheses:

(H-1) Shell midden sites will be distributed in areas that yield biotic resources, and these sites will be associated with specific topographic features:

(a) Sites will exist along the periphery of the island contiguous with the marsh.

(b) Sites will occur on the highest elevations.

(c) Sites will be abundant at locations where tidal creeks, streams, and other navigable bodies of water are closest to the island.

While shell middens are expected to exist mainly on the peripheries of the island, they may also occur in the interior. Widmer (1976) mentions the occurrence of several shell middens located in the vicinity of Victoria Bluff on the Colleton River. The middens, although small, are located in the interior of the peninsula adjacent to a freshwater pond and are situated on well-drained soils. A shell midden located next to a freshwater pond within the interior of Callawassie Island, which is also contiguous with the Colleton River, was found. The site was situated in an elevated part of the island and on well-drained soils (Michie 1982). While these site locations do not necessarily form discernible settlement patterns, they should not be ignored. Additional testing on Callawassie Island in the vicinity of other interior freshwater ponds failed to locate any evidence of shell middens or cultural materials. However, shell middens can occur within the interior near small freshwater ponds; thus, the reconnaissance survey of Daufuskie Island was also oriented towards testing specific areas for interior middens or non-midden sites associated with ponds and marshes.

Survey Methodology

Prior to implementing any field strategy for hypotheses testing, several local informants were interviewed concerning their collections and knowledge about archeological sites. Michael C. Taylor, a member of the survey crew, advertised in a Hilton Head Island newspaper, *The Island Packet*, for information concerning artifacts recovered from Daufuskie Island. These avenues of communication determined that many people had visited the island from the Hilton Head area, and that local people on the island had recovered artifacts from the beaches and shell middens. Practically everyone interviewed had recovered lithic materials from the eroded eastern beaches and ceramics from the peripheral zones on the northwest marshes. Bob Burn, Ms. A. L. Burn, and James Alberto, local residents of the island, provided specific information about site location and made their collections available for analysis. These people, who had spent several years conducting personal investigations throughout most of Daufuskie, verified the opinion of other collectors: an absence of prehistoric materials and shell middens in the island's interior. These interviews enhanced our knowledge of the area and substantiated our earlier inferences concerning site location.

In accordance with our hypotheses set forth, the following strategies were implemented: 1) an intensive surface inspection of the peripheral areas of the Haig Point, Webb, and Oak Ridge tract, 2) a testing program within the interior of these areas to determine the presence/absence of sites contiguous with freshwater sources, and 3) a testing program designed to recover materials associated with the historical components.

In an attempt to obtain an understanding of settlement patterns along the peripheries, the survey was extended to include areas outside of the

project boundaries. The marsh edge between the Haig Point and Webb tracts, the entire eastern beach, and the areas contiguous with Mungen Creek at the southern end of the island were inspected.

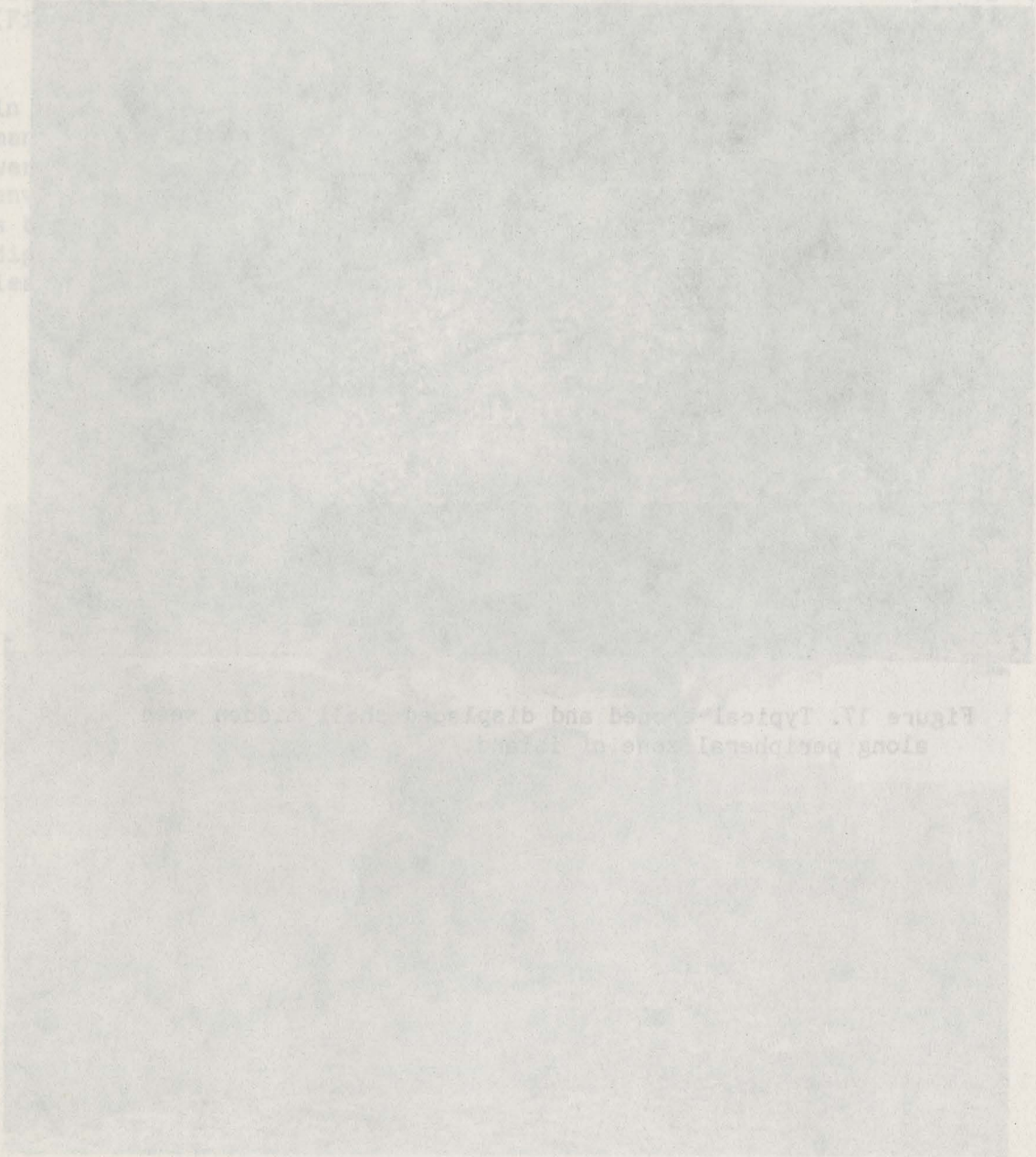
Subsurface testing along the peripheral zones was not required because erosion from tidal fluctuations, local and regional storms, and high sea levels provided sufficient exposure of habitation sites and cultural materials. A steel probe rod was used to determine the depth and spatial extent of horizontal and vertical site boundaries. Large sites were roughly mapped with the aid of a Brunton compass and a tape measure and were photographed (Figs. 16 and 17).

The survey of the island's interior focused on elevated topographies in the immediate vicinity of ponds and elevated soils overlooking the marsh. All exposed soils, e.g., roads, trails, paths, and fallow fields were inspected first. Following this investigation, specific forested environments contiguous with ponds and marshes were tested by establishing a base line across the highest elevation and removing soil with a posthole digger at ten-foot intervals. The test units were taken to a depth of at least twelve inches, penetrating the old plow zones and exposing an undis-

Figure 16. Michael C. Taylor probing shell midden for depth.

turbed matrix. The soil was sifted through one-quarter-inch hardwarecloth, and materials were bagged with appropriate provenience information. If cultural materials were encountered along any base line, four additional test units were placed at 90° intervals at a distance of five feet from the point of discovery to determine site density.

Figure 17. Typical eroded and displaced shell midden seen along peripheral zone of island.



SITE DESCRIPTION AND EVALUATION

Prehistoric Sites

The reconnaissance survey of the Haig Point, Webb, and Oak Ridge tracts, in addition to areas outside of the project area, yielded fifty-four archeological sites. Within the project area thirty-four sites were identified, including historic and prehistoric. The historic sites are discussed separately.

The prehistoric sites vary in size and structure, and represent either cultural continuity or single components of brief occupations. Most sites are small, characterized by shellfish deposits that have undergone erosion. Few sites are stable because of their locations in the peripheral zones or within the marsh. Some sites have completely eroded and are scattered across the marsh, while other sites have suffered 80-90% erosion. However, still other marsh-oriented sites have undergone little erosion and are intact.

There are no indications of shell middens existing in the interior of the island. Most of the middens occur in the peripheral zones, especially on the northwestern side overlooking the marsh and tidal creeks. The shell middens are located on elevated soils, and cluster in areas where navigible streams and tidal creeks penetrate the marsh and meander towards the mainland. In areas of low topographic relief where the adjoining forest lie at approximately the same elevation as the marsh, there is an absence of shell middens and other prehistoric sites.

Although a few Late Archaic and Early Woodland stemmed bifaces have been reported from the northwestern side of the island, the discoveries are infrequent and generally isolated. A number of bifaces has been recovered from the sandy beach on the eastern side of the island. A survey of relic collections indicates cultural continuity and a near complete sequence of bifaces that begin with Suwannee (Paleo-Indian) and end with small triangular points (Late Woodland/Mississippian). Unfortunately, the source of these points is unknown. Based on surface and edge abrasion, many of the bifaces remained in an environment of constant attrition for a considerable length of time. Apparently these highly abraded bifaces are the remnants of prehistoric sites that were destroyed from rising sea level and erosion. Not all of the bifaces are abraded; some are without noticeable alteration. This suggests 1) differential preservation after site destruction, or 2) successive erosion of sites through time. However, without knowledge of previous land forms, site locations, and rates of attrition, such determinations are difficult to make. Several attempts were made to locate an eroding site in the sandy profiles, but no evidence was found (Figs. 18 and 19).

It would appear that Woodland cultures were exploiting the northwestern section of Daufuskie Island for aquatic resources, primarily shellfish. While Late Archaic people apparently utilized this portion of the island,

Figure 18. Severely eroded beach which yielded a large number of lithic bifaces. Note the rapid erosion.

Figure 19. Eroded and scattered trees in vicinity of lithic biface recovery. Note the absence of dune formation.

such occupations were not extensive. The eastern portion of the island, which may have fronted a riverine environment during periods of low sea level, apparently witnessed continuous occupations for approximately ten millennia. These earlier sites, however, have evidently been destroyed (Fig. 20).

The interior of the island failed to produce any evidence of shell middens or other prehistoric sites. Oyster shell was frequently encountered in roadbeds and especially in areas that puddled during rainfall. In several fallow fields in the Haig Point tract, and in areas outside of the project area, a light scatter of crushed shell was observed. With the absence of cultural materials and the sparse scatter of shell across large areas, an association with agriculture is suspected. In fallow fields on Callawassie Island (Michie 1982) and Pinckney Island (Drucker and Anthony 1980), light scatters of oyster shells were also noted, which suggests that such occurrences are related to cultivation. The shell was utilized to increase the lime content of the soil.

Site Descriptions

38BU135 (Bluff Site). This site is one of the most significant on Daufuskie Island (Fig. 21). The site is located on the western side of the island and is situated on an elevated sandy bluff overlooking an extensive marsh with Bohicket soils and numerous tidal creeks. The bluff, which is composed of well-drained Wando soils, is being eroded by one of the larger tidal creeks (Figs. 22 and 23).

The entire exposed bluff profile exhibits an oyster shell midden that varies in thickness from about six inches at the edge to about eighteen inches at the center. The midden extends to the east for a distance of two hundred twenty-five feet and in a north/south direction for a distance of three hundred ninety feet. The interior of the site consists of shell middens that exist above and below the ground surface. The oblong- and crescent-shaped middens that exist above surface are variable in size, ranging in length from approximately seventy-five to one hundred fifty feet, and in width from approximately fifty to one hundred feet. Although the thickness varies, many are about thirty-six to forty-eight inches in depth. The subsurface midden, which covers most of the area, ranges from about six to ten inches in depth.

At the extreme southern edge of the site, the charred remains of human cremations were discovered by Michael Taylor in 1981. The fragments were first noticed eroding from a sandy profile and were excavated to prevent further loss and destruction (Appendix A).

While the majority of the Bluff Site is related to prehistoric occupations, a historically deposited oyster shell midden exists at the southwestern edge of the site. The deposit originates at the edge of the bluff and descends into the marsh at the periphery of the creek. Although cultural materials were not observed during our survey, Taylor has seen historic glass and ceramics eroding from the profile during the past years.

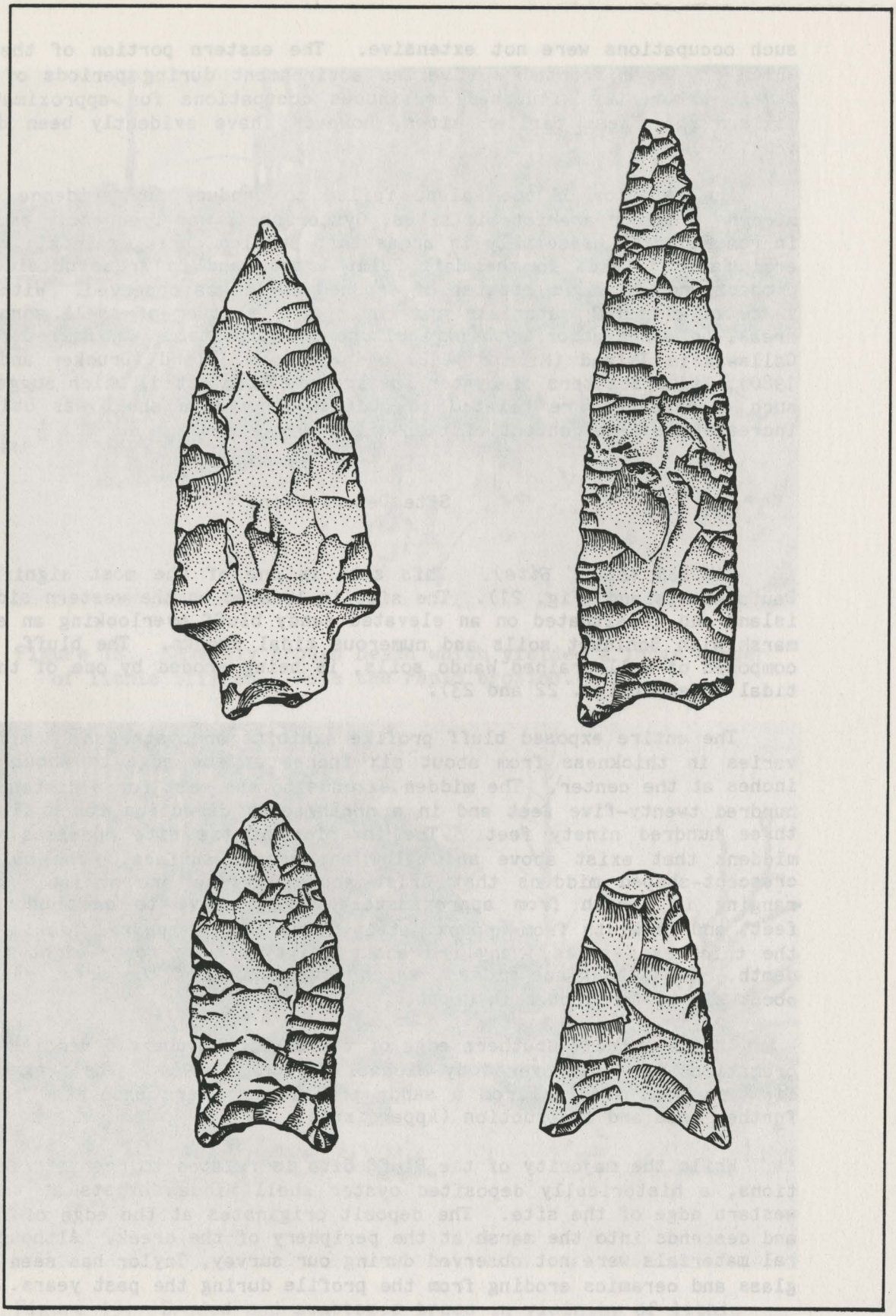


Figure 20. Sample of points (lithic bifaces) from east beach: A-Late Archaic, B-Early Archaic, C-Paleo-Indian, D-Woodland.

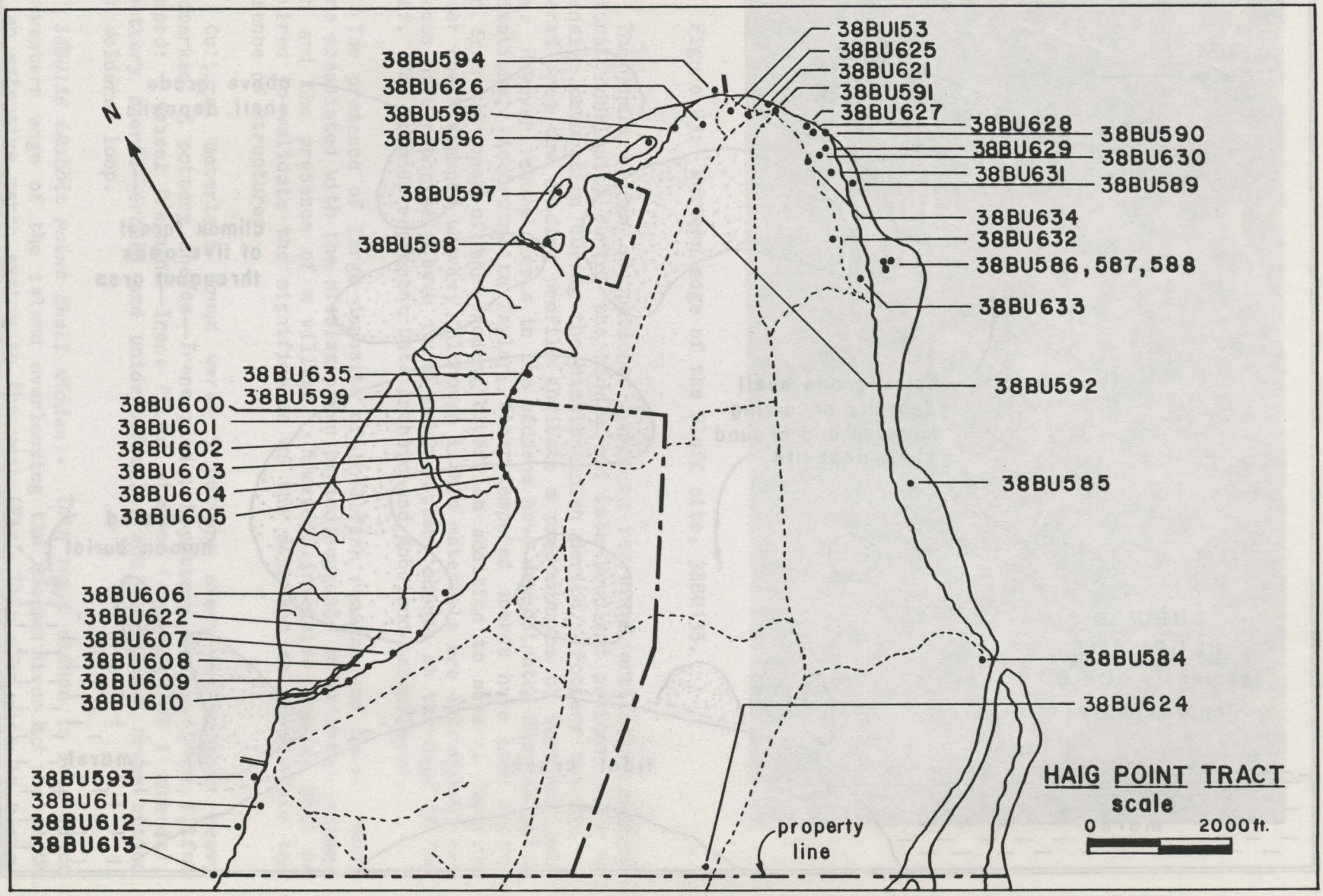


Figure 21. Site location on Haig Point Tract and contiguous property.

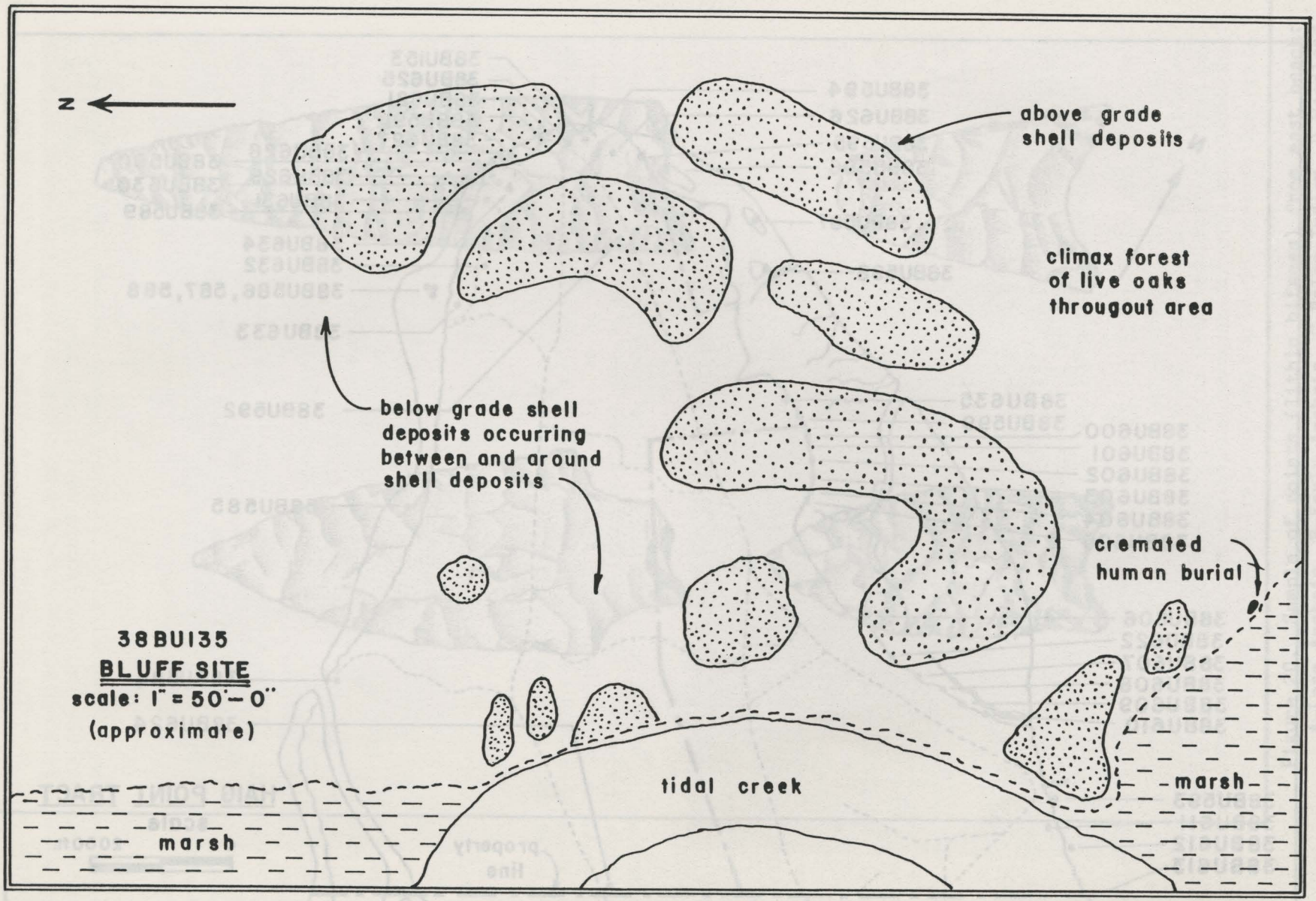


Figure 22. Plan view of the Bluff site, 38BU135, and surrounding areas.

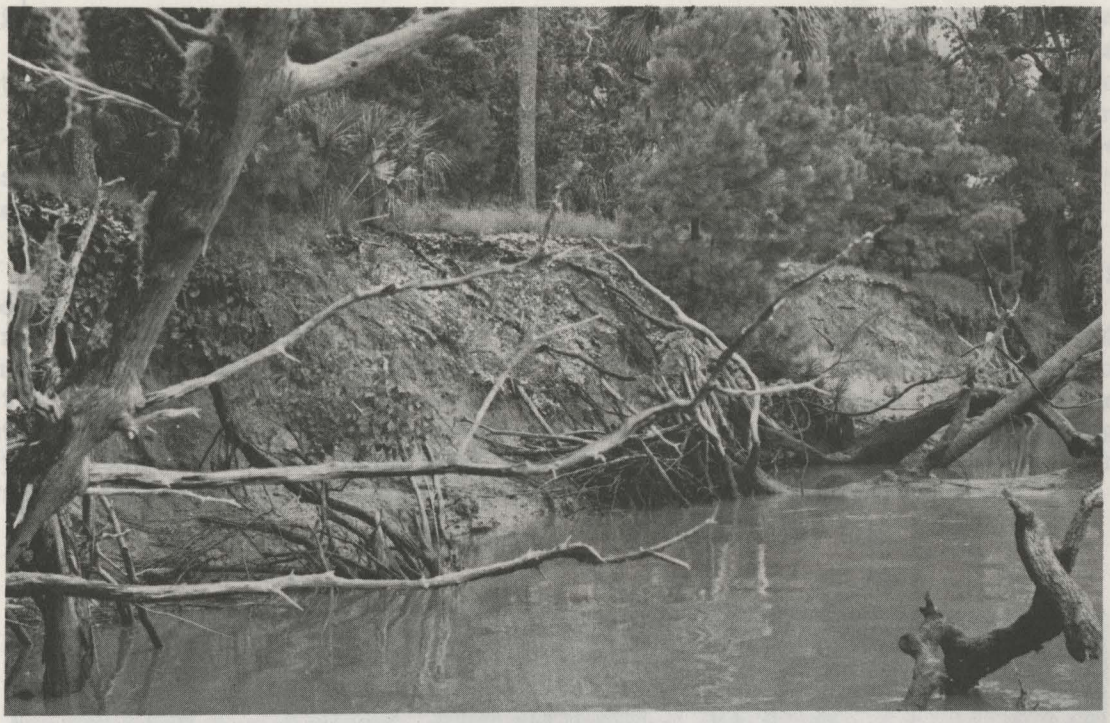


Figure 23: Western edge of the Bluff site, 38BU135.

The shell midden occupations, based on retreived artifacts, suggest cultural continuity during the Middle and Late Woodland periods, with an extensive occupation during the Mississippian period. Pottery sherds recovered from the eroding profile indicate a predominance of Woodland culture. However, shovel tests in the middens have demonstrated Mississippian habitations. According to Taylor, fiber-tempered sherds have been recovered from the base of the eroding bluff, in addition to several Deptford linear check-stamped sherds. Although lithic materials are infrequent, six bifaces have reportedly been found among pottery sherds at the base of the bluff. The bifaces represent Late Archaic and Woodland assemblages.

The presence of large deposits of shellfish remains and human cremations associated with the Mississippian period suggests an extended occupation and the presence of a village. However, intensive testing will be required to validate the significance of the site and to demonstrate the presence of structures.

Cultural materials found were: 5 pottery sherds--Wilmington heavy cordmarked; 3 pottery sherds--Irene plain; 8 pottery sherds--Irene filfot stamped; 1 vessel fragment--Irene filfot stamped (composite of 11 sherds); 8 pottery sherds--eroded and unidentifiable; and 1 circular brass button with soldered loop.

38BU136 (Rabbit Point Shell Midden). This shell midden is located on the western edge of the island overlooking the Cooper River to the north and an extensive marsh system to the west (Fig. 24). The site is repre-

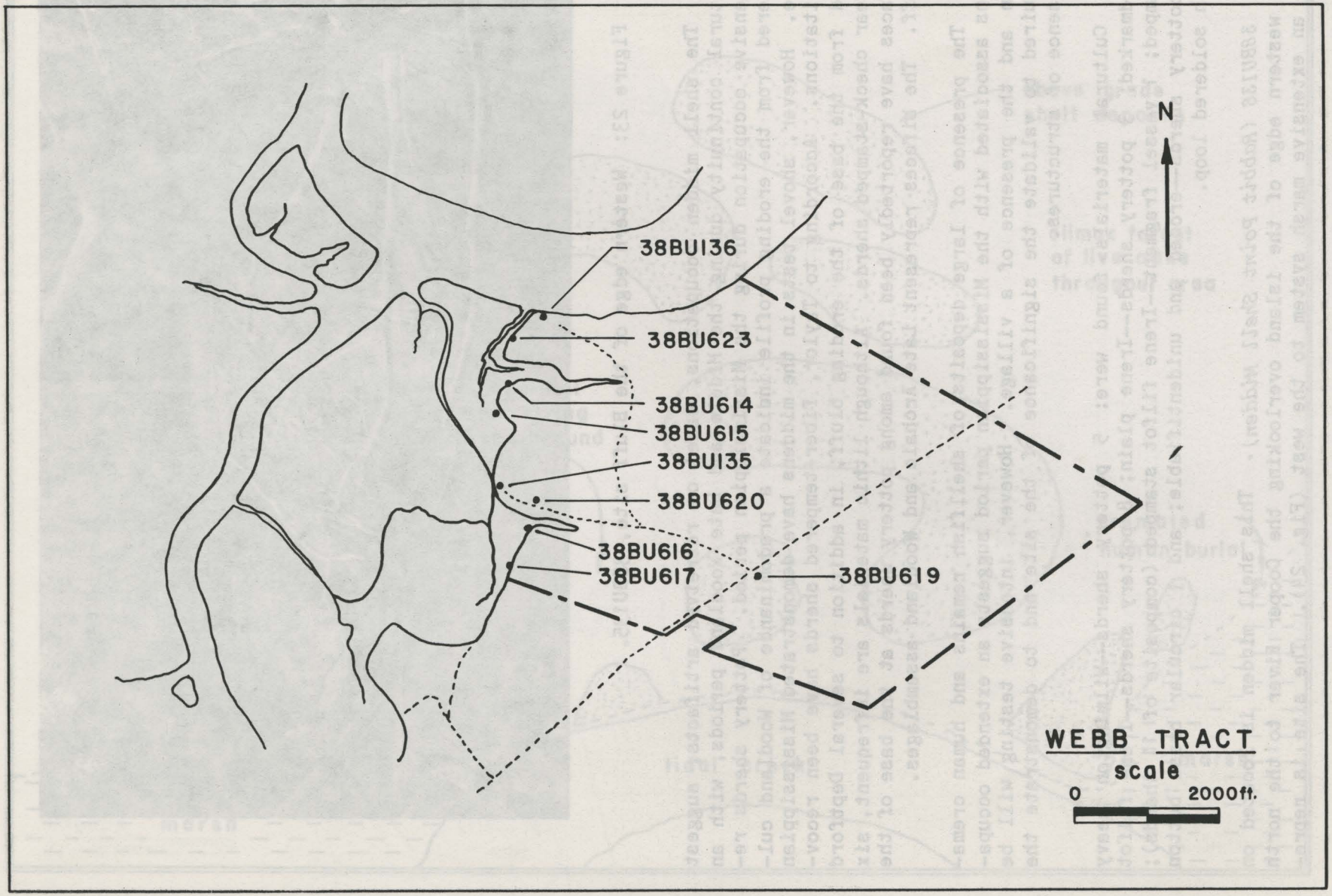


Figure 24. Site location on the Webb Tract.

sented by an oyster shell midden exposed in the eroding profile of Seewee soils. The midden ranges in depth from about six to ten inches and runs in an east-west direction for approximately one hundred fifty feet. Investigations with a probe rod indicates that the midden extends for a distance of about seventy-five feet inland and that the shell decreases in thickness as the midden extends into the interior. Oyster shells dominate the shellfish, but there are small inclusions of clam, periwinkle, and knobbed whelk shells.

The beach in front of the eroding midden is littered with debris from the site. Shellfish remains are scattered for the entire distance and are mixed with prehistoric pottery sherds and various portions of a 20th-century occupation. Sections of a tin roof, window weights, pieces of a metal bed, window pane fragments, and unidentifiable metal fragments indicate that a residential structure collapsed into the marsh. According to Taylor, the house was owned and occupied by a family named White. There were no indications of historic glass or ceramics (Fig. 25).

Figure 25: Eroded face of the Rabbit Point Shell Midden, 38BU136.

A survey of relic collections indicates that the site was sporadically occupied during the last three and a half millennia. There is a high number of cordmarked sherds in various collections, and fewer numbers of fiber-tempered, Deptford, and complicated stamped. Lithic materials in the form of stemmed and triangular bifaces and quartz hammerstones occurred infrequently. Taylor, who has visited the site during the past six years, re-

ported that 19th- and 20th-century bottles were recovered from the beach, in addition to other prehistoric materials that were unreported during the survey.

Based on this information, important archeological materials have eroded from the site, and there is potential for additional materials in an undisturbed context to be recovered from the shell midden. Cultural materials were: 1 pottery sherd--plain fiber-tempered; 11 pottery sherds--Wilmington heavy cordmarked; 2 pottery sherds--fabric impressed; 3 pottery sherds--Irene filfot; 7 pottery sherds--eroded and unidentifiable; 1 blade portion of a chert biface; 1 quartz hammerstone; 5 fragments--ironstone whiteware; 1 fragment--brown glazed whiteware; 1 fragment--transfer printed whiteware; 1 fragment--alkaline glazed stoneware; and 1 fragment--clear glass bottle.

38BU153 (Tabby Ruins). These ruins were historic components with prehistoric components underlying the structures. They are discussed more fully under historic sections.

38BU584 (Lower House Site). The lower house site contained historic to prehistoric components. It is discussed in the historic section of the report.

38BU585. This site is located on the eastern side of the island overlooking Calibogue Sound. The site is situated on a remnant land form being eroded by tidal and wave action. Oyster shell remains are contained in the root structure of an eroding palmetto tree. Approximately ninety percent of the site has been destroyed, as evidenced by a large scatter of oyster shells. No pottery or other cultural materials were found.

38BU586. Located on the eastern portion of the island and situated approximately two hundred feet from the mainland in a marshy environment is a small tidal creek associated with Calibogue Sound. This site is associated with two shell middens located about one hundred feet to the northeast. This midden is elevated about three feet above the surrounding marsh and lies in a small cedar hummock, exhibiting an oyster shell deposit some twenty-five feet long and eighteen feet wide. The depth of the deposit varies from ten to twelve inches at the center. No cultural materials were noted in the exposed shell.

38BU587. Located approximately one hundred feet northeast of the former site (38BU586), this linear shell deposit is about one hundred feet long and twenty feet wide, with a depth ranging from thirty inches deep at the southern edge to eighteen deep at the north. The midden appears to be located on an old linear dune formation that presently supports several small cedar trees, wax myrtles and a palmetto. Although a considerable portion of the midden is exposed, no diagnostic cultural materials were found. Two deteriorated prehistoric pottery sherds were observed, but they were eroded beyond identification.

38BU588. Located about 50 feet in a north-northwest direction from 38BU586 and fifty feet west of 38BU587, this site contains linear shell midden that was also deposited on what appears to be an old dune formation. The midden is approximately forty feet long and ten feet wide, with a depth

at the center ranging from eight to ten inches. An inspection of exposed areas failed to yield any cultural materials. All three of these shell middens are intact and have potential for yielding more cultural information about the Indians.

38BU589. This site is located in the marsh and is associated with a slightly elevated ridge composed of Capers soils. Located south of the Haig Point Lighthouse and facing Calibogue Sound, the remnants of an old shell midden lie scattered in the marshy environment of Spartina patens. About twenty-five feet to the south is a small tidal creek that becomes navigible at high tide. Rising sea levels and tidal cycles have destroyed and scattered the site's contents in an area forty feet long and ten feet wide. Several eroded and unidentifiable pottery sherds were observed in the displaced shells.

38BU590. This site is situated at the extreme northeastern corner of the island on a sandy bluff elevated some ten feet above the marsh overlooking Calibogue Sound. The site is characterized by an exposed profile of shell midden that is falling into the marsh. The midden is twelve inches deep at the center and is exposed for ten feet. Probing in the interior determined the width increases to fifteen feet and continues inland for fifteen feet. No cultural materials were observable in the Wando soils.

38BU591. Located on the northern edge of the island and situated on the periphery of the forest, this site, composed of a light scatter of oyster shell, overlooks the marsh and the Cooper River. The site is deposited on Wando soils above the marsh. Storm damage occurs around the edge, exposing shell three inches deep. The midden is ten feet wide and fifteen feet long.

38BU596. Represented by a shell midden located on the eastern edge of a large march hummock facing the Cooper River, this site is composed primarily of oyster shell. The midden is exposed approximately one hundred twenty-five feet on the northern edge and seventy-five feet on the eastern edge. The center of this small peninsula is devoid of midden deposits and the shell is confined mainly to the periphery, extending inward fifteen feet. Probing across the deposits indicates the depth fluctuates from six to eight inches in areas of accumulation; other zones have only a slight deposit. The humus in the interior of the midden is two to three inches thick. No cultural materials were observed in the scatter of midden refuse at the base of the two-foot profile.

38BU597. This site is not located within the Haig Point tract, but it is one of the largest shell middens discovered on Daufuskie Island. The midden is located within one hundred feet of the Cooper River, covering the entire surface of a three-acre marsh hummock. Probing across the hummock determined that shell occurs from six inches to forty-eight inches. Exposed shell in the interior of the hummock is not noticeable because the area is blanketed with humus. Pottery sherds along the hummock's periphery indicate cultural continuity beginning with Deptford and ending with Irene filfot. Small amounts of animal bone were also noted. Oyster shell, clam, whelk, periwinkle, and razor clam were noted in the scattered deposits.

38BU598. Located outside the project area, this site is situated on the northwestern edge of a marsh hummock and adjacent to a small tidal creek. It is positioned about three hundred feet from the Cooper River. Exposed oyster shell deposits are observable across the face of an eroding sandy profile for the entire distance of the western edge, one hundred seventy-five feet. The depth of the shell varies from one to two inches and from six to eight inches in zones with deeper accumulations. The midden extends no more than fifteen feet into the interior of the hummock. At the extreme northern and southern edges of the hummock, the midden extends for thirty feet. Although there was a great deal of visibility because of a recent fire, and although appreciable amounts of the midden had fallen down the sandy bluff, there were pottery sherds and other cultural materials.

38BU599. This small site is located at the extreme southern edge of the Haig Point tract on the western side of the island. At the edge and collapsing into the adjacent marsh is a shell midden approximately twenty feet wide and extending into the interior for a distance of ten feet. Probing determined that the deposit is twenty inches deep at the center. Displaced shell at the base of the eroding deposit failed to yield cultural materials.

38BU601. Located slightly north of site 38BU599, this site is one to two inches oyster shell midden approximately twenty-four inches wide. No cultural materials were observed in the Wando soils or in the scattered debris at the base of the sandy profile.

38BU602. Located outside the project area on the northwestern side of the island and facing extensive marsh systems and tidal creeks, this site is eroding from an elevated bluff composed of Wando soils. It is a small shell midden thirty inches wide and two inches deep. There are no cultural materials in the profile or among the scattered midden debris.

38BU603. This site is located outside the project area in the same locality as 38BU602. Oyster shell is deposited in Wando soils and is exposed for a distance of about four feet, exhibiting a depth of three inches at the center. No cultural materials were observed in the profile or the debris scattered at the base of the low-lying sandy bluff.

38BU604 (Cedar Point Shell Midden). Located outside the project area and in the same locality as site 38BU603, this site contains a scattered deposition of oyster shell in Wando soils. Elevated about two feet above the adjacent marsh, the shell occurs sporadically for one hundred feet across the exposed profile. The depth of the midden ranges from three to eight inches.

Two historic middens containing 20th century ceramics and bottle fragments were found seventy-five feet from the Cedar Point Shell Midden. These middens are fifteen feet long and six feet wide, with a depth of three feet. There is no accumulation of humus and the middens are easily visible. Between these historic middens and the edge, there is another small historic midden composed of freshly deposited oyster shell and large fragments of blue bottle glass. All of these middens are probably related to an occupation no earlier than 1930.

38BU605 (Oak Point Shell Midden). Located outside the project area near 38BU604, this shell midden is on a small peninsula that extends from the mainland into the marsh. Oyster shell is deposited in Wando soils, extending twenty feet on the eastern and western edges of the peninsula to a depth of eight to twelve inches. The heaviest occurrence of shell is found on the edge, and the central portion of the peninsula is virtually devoid of shell. The entire area is blanketed with four inches of humus. There is considerable erosion at the edges. There were no indications of cultural materials. The site is probably prehistoric.

38BU606 (Myrtle Hummock Shell Midden). Located outside the project area, this site lies in a marshy environment surrounded by Capers soil, glasswort, and *Spartina patens*. The site is situated fifty feet north of the mainland and is composed of oyster shell with small inclusions of knobbed whelk and clam. Nearly circular, the midden measures thirty-five feet in diameter and has a depth of two feet at the center. Wax myrtle and small cedar form a dense cover that protects the midden from erosion. Although there is erosion at the base of the deposit, no cultural materials were found.

38BU609. Located outside the project area, this site is a small scatter of oyster shell eroding from the Wando soils. Size of the deposit is unknown because of extensive undergrowth. Cultural affiliation is unknown. It is situated against a tidal creek.

38BU610. Located outside the project area, this site is a small scatter of oyster shell that is eroding from Wando soils and the sandy bluff. The dense undergrowth prevented size determination, but the deposit appears small, without cultural materials.

38BU612 (Beach Site). Located outside the project area and slightly south of the Cooper River Landing, this site is scattered across the sandy beach at the base of an elevated bluff composed of Seabrook soils. Oyster shells and pottery sherds were observed at the base of the bluff. There are no indications of an existing shell midden or occupation; however, the scattered shells and sherds would indicate a completely eroded midden. This midden debris is scattered over a small area, thirty-five feet long and ten feet wide, suggesting a spatial association although displaced from its original context. The cultural materials recovered were: 1 pottery sherds--plain fiber tempered; 3 pottery sherds--Deptford simple-stamped; 5 pottery sherds--Wilmington heavy cordmarked; 1 pottery sherd--Savannah Check stamped; 2 pottery sherds--Irene filfot; 7 pottery sherds--plain; 25 pottery sherds--eroded and unidentifiable; and 1 heat-treated chunk of chert.

38BU614. This site is located on the Webb Tract on the western periphery overlooking extensive marsh and tidal creeks that flow from the Cooper River. The site is a small shell midden deposited on Seewee soils that is eroding into the adjacent marsh. Oyster shell extends four feet, with a depth of two to three inches in the center. No cultural materials were found.

38BU615 (Periwinkle Shell Midden). Composed almost entirely of periwinkle shells, this site is located on the western side of the island on a

promontory of elevated Seewee soils. The highly eroded edges indicate that shell extends for a distance of forty-five feet on the southwestern edge and continues around the point for about thirty additional feet. Along the edges the periwinkle deposit is about six to eight inches deep; however, the accumulation gradually increases to twenty-four inches at the center.

No cultural material was found; however, Taylor stated that relic collectors have recovered several stemmed chert bifaces and pottery sherds, dating the site to a Late Archaic/Early Woodland occupation. A great deal of the site is intact and appears capable of yielding cultural information.

38BU616. This site is a small shell midden located south of the Bluff Site. It is partially exposed in an eroding profile of Wando soils. This exposure shows a midden three to four inches thick and four feet wide. No cultural materials were observed, but humus covers the surface of the deposit. This oyster shell midden is situated on the periphery and overlooks a marsh with tidal creeks associated with the Cooper River and Ramshorn Creek to the west and northwest.

38BU617. Located two hundred feet south of 38BU616, this small oyster shell midden also overlooks the marsh and tidal creeks. The exposed profile of Wando soils shows four feet of shell three inches deep. It extends inland for three feet. No cultural materals were found.

38BU621. This site is located in front of the Haig Point Lighthouse. It is composed of two oyster shell middens, eroding from a sandy bluff. A thin scatter of oyster shell connects the two deposits, suggesting contemporaneity. Each deposit is five to six feet wide, varying in depth from four to six inches. A single complicated stamped sherd, suggestive of Irene filfot, was found.

38BU622. This oyster shell midden is located on the northwestern side of the island on Wando soils, facing the marsh and tidal creeks. It measures twenty-four inches wide and one to two inches deep. No cultural materials were found in the midden.

38BU623. This site is located south of site 38BU136, overlooking the marsh and tidal creeks. The site, composed primarily of oyster shells, is six feet inland. The midden is deposited on Seewee soils and covers an area approximately ten feet long and five feet wide, ranging in depth from six inches at the edge to twenty-four inches at the center. No pottery sherds were found.

38BU626. Located south of site 38BU153, this site is in an open area west of the main dirt road. This area has burned, as evidenced by melted glass and charred fragments of wood. A single plain pottery sherd was found on the surface.

38BU627. This site is located five hundred feet south of the Haig Point Lighthouse and two hundred sixty-five feet northeast of the small dirt road to the east. The site was discovered by testing with a posthole digger in Wando soils twenty feet from the bluff. The site is in an old cultivated field with old linear furrows and about forty years of forest

growth. A single cordmarked pottery sherd was found with coarse sand tempering. The size of the site is not determined.

38BU629. Discovered in a testing program, this site is located one thousand feet south, southeast of the Haig Point Lighthouse and two hundred feet from the marsh overlooking Calibogue Sound. Lying within Wando soils and unassociated with shell middens, the site was discovered in an attempt to delimit a historic occupation. The spatial dimensions are not known at present. One Irene curvilinear stamped sherd was found.

38BU631. This site is located three hundred fifty feet south of sites 38BU629 and 38BU630 and one hundred fifty feet west of the marsh and Calibogue Sound. A plain, coarse sand tempered sherd was discovered during a testing program in Wando soils. The spatial dimensions of the site are unknown.

38BU632. Located within the Harper Tract, north-northeast of site 38BU623, this site also lies within Wando soils and was discovered with subsurface testing. The site is situated on top of a sandy ridge that descends into the marsh and Calibogue Sound. The site size is unknown. One Savannah fine cordmarked sherd and two deteriorated cordmarked sherds were found.

Historic Sites Data

Introduction

Ten historic period sites were recorded within the proposed project area during the Daufuskie Island archeological survey. Seven sites (38BU153, 38BU584, 38BU594, 38BU620, 38BU628, 38BU630, and 38BU634) represent nineteenth century occupation of the island and two sites (38BU591 and 38BU633) date from the late nineteeth through the early twentieth centuries. The remaining site (38BU625) apparently represents early to mid-twentieth century occupation of the area. In addition, seven sites were recorded, which were located outside the present project area. Generally, these sites date to the nineteenth and twentieth centuries, including the late 1950s. Data were also recorded for the seven cemeteries located on the island and this information will be included in a separate section following the historic sites data. This section provides a basic environmental, temporal, and spatial definition of each of these sites. Appendix B presents the artifact summaries from each provenience of the sites.

38BU153 (Haig's Point Plantation). This site consists of the ruins of a nineteenth century plantation settlement with earlier Woodland and Mississippian prehistoric components. It is located on the northeastern end of the Haig's Point tract and overlooks the Cooper River to the north (Fig. 26). The plantation is represented by the remains of thirteen tabby structures in varying degrees of preservation. In addition, several of the structures have apparently associated shell refuse middens located immediately adjacent (see Fig. 27 for preservation).

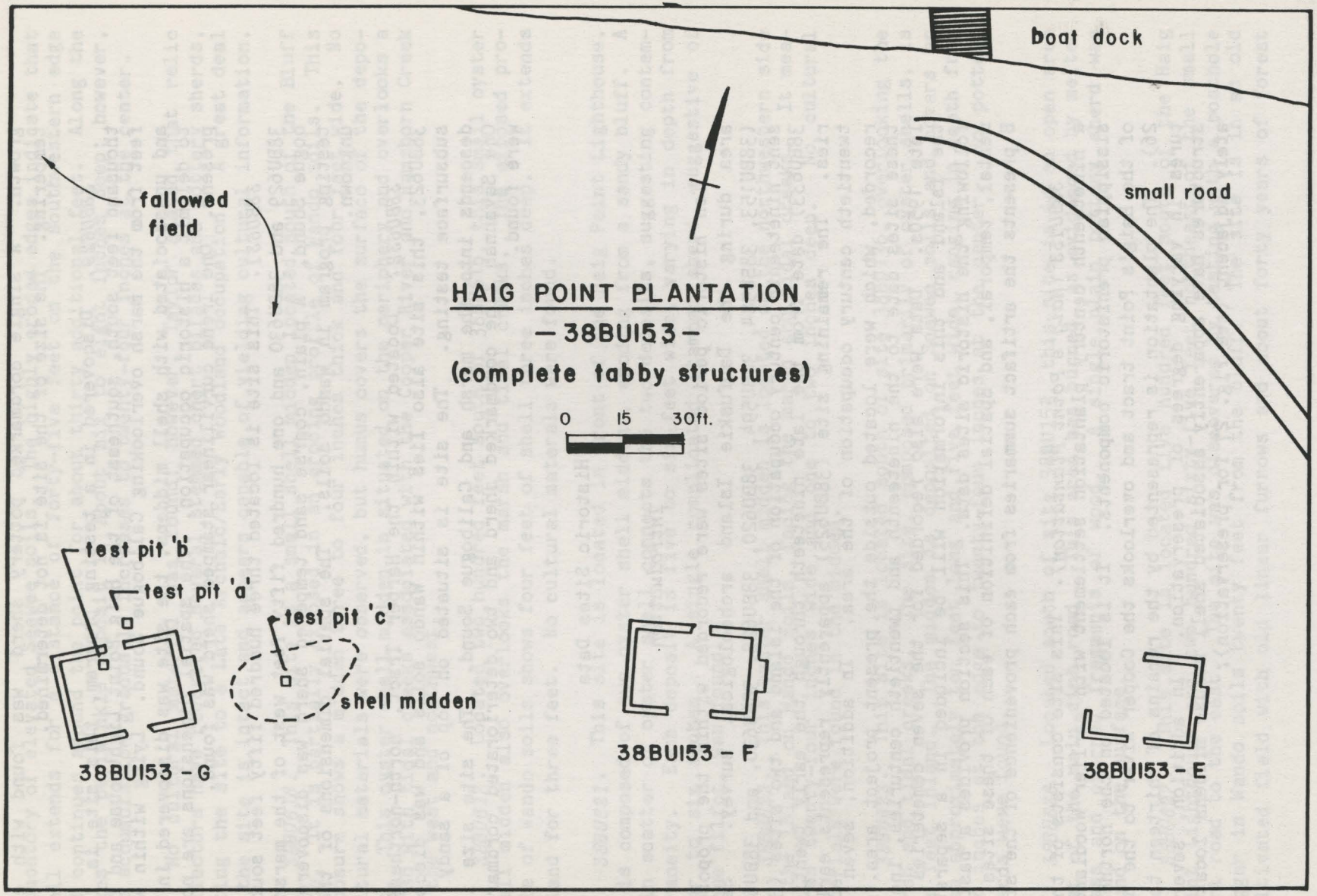


Figure 26. Tabby complex on Haig Point tract.

Figure 27: Tabby structure 38BU153F at Haig Point Tract.

Although documentary information is lacking for this area, these tabbies have been traditionally identified as slave quarters accompanying a plantation belonging to George Haig. Archeological evidence indicates that at least one of the tabby structures (38BU153G) was built sometime between 1826 and 1846. This is suggested by the presence of cut and stamped nails and other architectural artifacts that serve as specific temporal markers (Mercer 1923; Nelson 1968).

The three most complete structures (38BU153E, 38BU153F, and 38BU153G) were apparently constructed almost entirely of tabby as portions of the four walls and chimney are present at each of these buildings. Five of the remaining ten structures (38BU153A, 38BU153B, 38BU153C, 38BU153D, and 38BU153M) are remnants of chimney walls and foundations. The composition of the major portions of these buildings is uncertain because extensive probing in these areas failed to locate any wall foundations. This suggests that these structures were probably made of wood with tabby chimneys. The tabby structures 38BU153H, 38BU153I, 38BU153J, 38BU153K, and 38BU153L have been reduced to rubble and no determination of their design can be made at this time.

Although only tabby 38BU153G can be dated archeologically at this time, the architectural similarities between all of the structures suggest a roughly contemporary construction date. All of the structures have an extremely high oyster shell to mortar ratio and a consistent wall thickness of nine inches. With the exception of 38BU153D, all of the chimney structures measures six and two-tenths feet across and these dimensions are

identical to the dimensions of the chimneys on the more complete tabbies. Structure 38BU153D is much larger with a length of eight feet, suggesting that this structure served a different function or was associated with a higher status. The building may have functioned as a common kitchen for the plantation or been an overseer's residence.

To determine the extent of plowing disturbance and to provide basic comparative data, three, three-foot square test units were excavated at tabby 38BU153G. Test unit A was excavated on the outside of the structure adjacent to the front door, and a second unit (B) was placed adjacent to the door on the inside of the tabby. A third test unit (C) was excavated through a shell refuse midden adjacent to the structure.

Comparison of data from these units could be useful for determining patterns of refuse disposal as well as for discerning architectural specifics of the structure. Excavations at other sites have illustrated that areas adjacent to the doors of buildings generally produce the highest percentage of domestic artifacts (such as ceramics, bottle glass, tableware, etc.) while internal areas have the highest percentages of architectural materials (South 1977 and 1979: 213-237). In addition to the refuse disposal information, data recovered from test units within the structure (such as the number and type of nails) may indicate the type of roof initially present on the buildings.

Test units A and B did not conform to the expected artifact ratios. Unit A, which should have produced a high percentage of domestic refuse, had only twenty-seven percent domestic artifacts, while the architectural materials accounted for sixty-seven percent of the total artifacts from the unit. The percentages from test unit B were roughly equal with thirty-five percent domestic and thirty-eight percent architectural artifacts. The absence of domestic refuse outside the structure may indicate intentional deposition of the materials away from the building. Additionally, the lack of architectural materials within the structure suggests that the roof was constructed possibly of tabby. However, these assumptions are based on a relatively small sample of data and cannot be substantiated without further intensive testing and/or excavation.

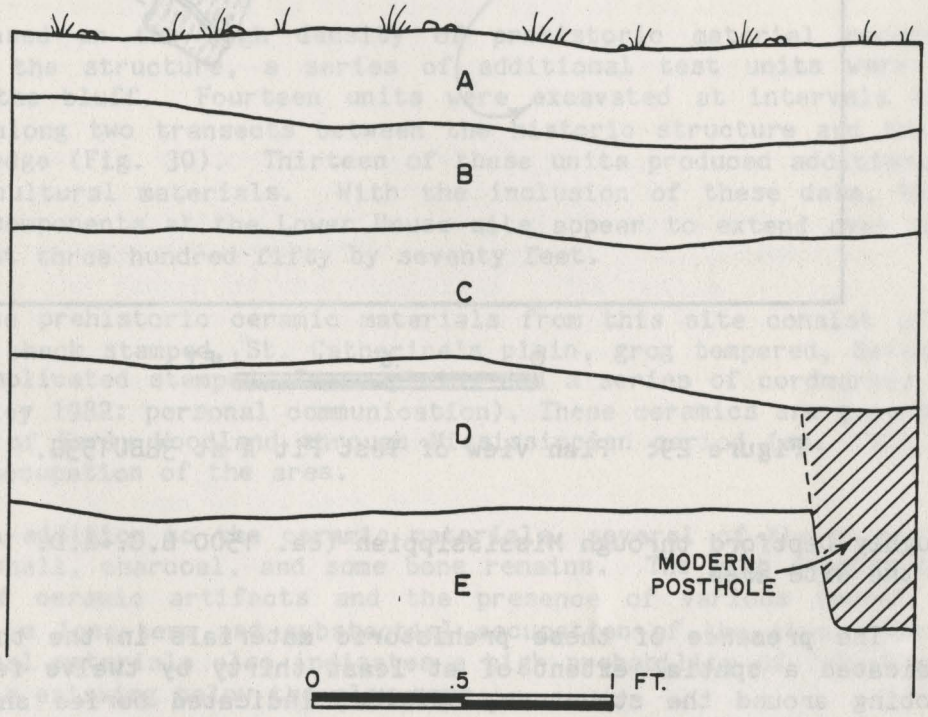
Test unit C was excavated through a refuse midden located adjacent to the structure. This unit produced large quantities of shellfish and food bone remains. Preliminary analysis of this data indicates that oyster and whelk, as well as pig, deer, possibly cow, and numerous fish and turtle species are well represented. The wide variety of species represented in these remains indicates a heavy reliance on both wild and domesticated animals for basic subsistence requirements. This is consistent with numerous studies that have shown pork and corn to be the major staples in the southern plantation diet with supplements of wild game and aquatic resources when necessary (Hilliard 1969: 461-480 and 1972).

In order to recover extremely small floral and faunal materials, individual food samples were excavated from each level. All shell, bone, and soil was kept for later fine scale analysis. Unfortunately, the time limitation did not permit this analysis. These materials, however, may provide a comparative base for recovery of similar materials at other middens within the site during a later phase. Comparison of different levels within

individual middens may allow for reconstruction of changing diets through time, and comparison of various middens at the site may provide information regarding status differences between occupants of the structures or differences between individual household subsistence strategies.

During the excavation of the test units at 38BU153G, a prehistoric Woodland and/or Mississippian component was discovered. Evidence of this component was recovered from each of the three test units and consisted of both midden and non-midden deposits. The site stratigraphy, as illustrated by the north profile of test unit A, consisted of a plow zone of mixed historic and prehistoric materials followed by an apparently undisturbed prehistoric midden. Underlying this layer was an apparent living floor with in situ ceramic materials and probable postmold or small storage pit features (see Figs. 28 and 29).

The ceramic materials recovered from the three test units consist of Deptford linear check stamped, a "Deep Creek type" fabric impressed, St. Catherine's grog tempered, and Savannah cordmarked, check stamped, and plain (Trinkley 1982: personal communication). These materials indicate a



A- DARK GREY TO BLACK ORGANIC ROOT ZONE
B- DARK GREY TO BLACK PLOW ZONE
C- UNDISTURBED MIDDEN
D- MOTTLED GREY AND YELLOW SAND
E- MEDIUM YELLOW-TAN SAND

Figure 28: Profile of Test Pit A at 38BU153G.

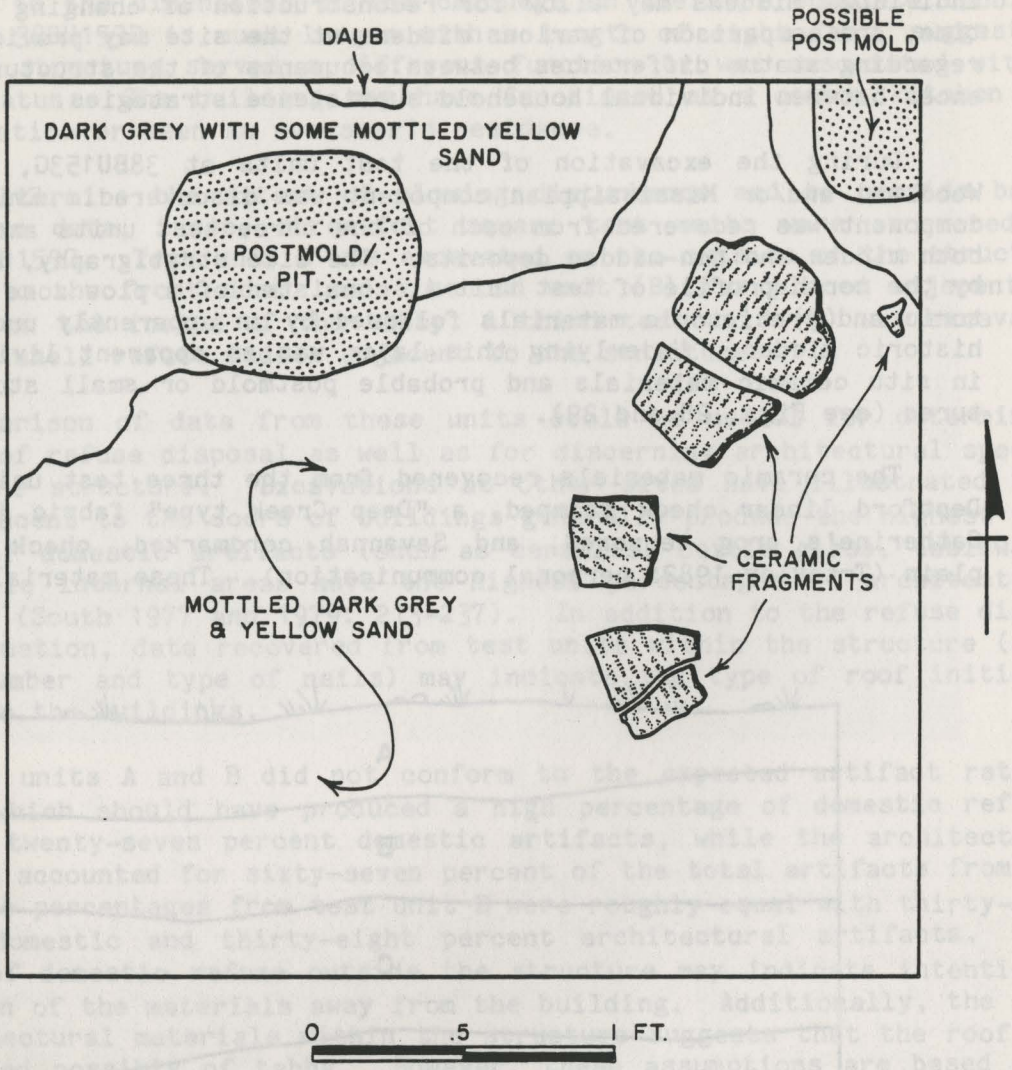


Figure 29: Plan view of Test Pit A at 38BU153G.

roughly Deptford through Mississippian (ca. 1500 B.C.-A.D. 1700) occupation of the site area.

The presence of these prehistoric materials in the three test units indicates a spatial extent of at least thirty by twelve feet. Extensive probing around the structure, however, indicated buried shell midden remains over a minimal sixty by thirty foot area. Additionally, probing in areas adjacent to the other tabbies indicated shell midden deposits associated with the three complete structures (38BU153E, 38BU153F, and 38BU153G), but absent from the remaining structures. Although the exact relationship between the tabby structures and the buried shell deposits is not clear, this apparent association may indicate that the more complete tabbies were so constructed because of their advantageous position over existing shell deposits.

During the course of the survey, extensive testing was conducted to locate evidence of a plantation "big house" that should have accompanied the tabby slave quarters. The primary focus of this search was the area between the tabby structures and the Haig's Point lighthouse (38BU591). Approximately one hundred fifty "posthole" tests units were excavated in the area. Although an early to mid-twentieth century site (38BU625) was recorded, no substantial nineteenth century materials were recovered.

38BU584 (Lower House Site). This multi-component prehistoric and historic period site is located on the bluff overlooking Calibogue Sound near the southern end of the Haig's Point tract (Fig. 30). It is situated on a flat, wide plateau approximately one hundred fifty feet from the bluff edge. The historic component of the site consists of a mound of brick and tabby mortar rubble extending over an area of sixteen by fourteen feet. It is situated approximately one hundred fifty feet from the bluff in the midst of eight large live oak trees that appear to form an "avenue" to the northeast of the rubble (Fig. 30). Three one-half-yard square test units were excavated adjacent to the structure. The historic material recovered from these test units consisted of two cut nails and one glass fragment. In addition, sixteen prehistoric ceramic fragments were recovered from the excavations.

Based on the high density of prehistoric material recovered from around the structure, a series of additional test units were excavated along the bluff. Fourteen units were excavated at intervals of fifteen yards along two transects between the historic structure and the southern bluff edge (Fig. 30). Thirteen of these units produced additional prehistoric cultural materials. With the inclusion of these data, the prehistoric components at the Lower House site appear to extend over an area of at least three hundred fifty by seventy feet.

The prehistoric ceramic materials from this site consist of Deptford linear check stamped, St. Catherine's plain, grog tempered, Savannah plain and complicated stamped, Irene plain, and a series of cordmarked materials (Trinkley 1982: personal communication). These ceramics are generally indicative of Early Woodland through Mississippian period (ca. 1500 B.C.-A.D. 1700) occupation of the area.

In addition to the ceramic materials, several of the units also produced shell, charcoal, and some bone remains. The high density and diversity of ceramic artifacts and the presence of various faunal materials suggest a long-term and substantial occupation of the site. The recovery of faunal materials also indicates a high probability of intact subsurface features existing below the plow zone.

38BU591 (Haig's Point Lighthouse). This site consists of a lighthouse and associated outbuildings constructed by the United States Government in 1873 to guide ships into Calibogue Sound. The lighthouse was part of a front and rear range system in which complete alignment of a front tower light with the light at Haig's Point marked a safe entry into the channel. The tower for the front light was located at site 38BU633 to the south of Haig's Point.

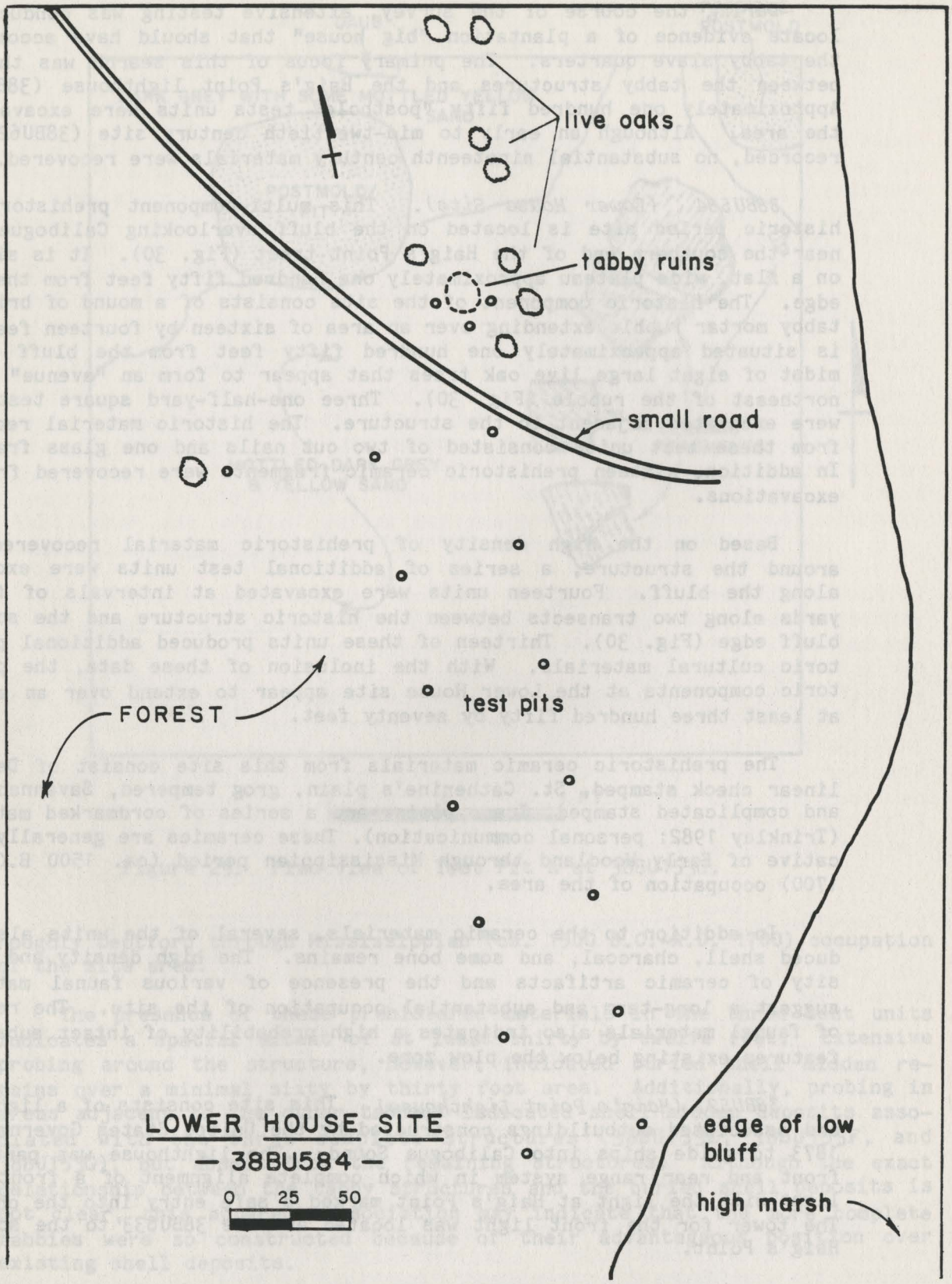


Figure 30. Lower House Site, 38BU584.

The lighthouse compound is situated on the eastern tip of the Haig's Point tract and directly overlooks the Cooper River to the north and Calibogue Sound to the east. It extends over an area of approximately three hundred by one hundred fifty feet and is delimited by a series of concrete posts that formerly served an anchors for a fence around the site. In addition to the lighthouse (38BU591A), other features of the site include a standing wickhouse structure (38BU591B), the remains of a privy (38BU591C), a well (38BU591D), and several apparent refuse middens (38BU591E and 38BU591F) (See Fig. 31).

Two test units were excavated in different portions of the site during the survey. The first was a three-foot square unit excavated to the rear of the lighthouse. This square produced large quantities of architectural materials, including shell and brick rubble and cut and stamped nails, with fewer quantities of ceramics and domestic refuse. Analysis of the materials from this unit also indicates a time range roughly equivalent to the occupation range of the lighthouse (1873 to 1930).

The temporal and functional character of this artifact assemblage suggests that these materials are probably associated with the kitchen structure that accompanied the lighthouse. The structural nature of these deposits are also suggested by the stratigraphy of the unit. Broken and burned shell, tabby, and brick, as well as large quantities of nails extend to depths of one and three fourths feet to a layer of charcoal and burned boards (see Fig. 32).

Located to the northwest of the lighthouse were the remains of the supporting foundations of an apparent privy. The privy measured approximately six by ten feet with an opening on the north side toward the Cooper River (Fig. 33). The structure was composed of two sections as a dividing wall ran the length of the foundation. The bottom portions of both the dividing wall and the northern walls of the privy were constructed of tabby with layers of brick and mortar having been added to the top. The southern walls were composed entirely of brick and mortar. This suggests that the southern section of the privy was probably added to an original tabby structure but with substantial remodelling of the old tabby foundations.

Two small test units were excavated in the eastern third of the privy with separate units in both sections of the structure. Test unit A was excavated through the tabby portion of the privy. The stratigraphy in this section consisted of 0-0.25 feet of dark grey organic zone, 0.25-0.45 feet of mottled grey-tan sand with lenses and chunks of lime, 0.45-0.75 feet of mottled grey-tan and yellow-tan sand. This layer produced a high density of ceramics and other cultural materials. These materials consisted of two porcelain cups, a stoneware chamber pot (in several pieces), and other ceramics that generally date to the late nineteenth-early twentieth centuries.

Underlying the "C" layer of the privy was a solid brick floor. The floor was an apparent addition because it was unmortared and unattached to the walls of the structure. Excavations below the brick floor produced a small quantity of cultural material and evidence of intentional filling of the privy. Since no earlier privy pits or lime layers were recovered, the nature of this filling is not understood at this time. Earlier deposits

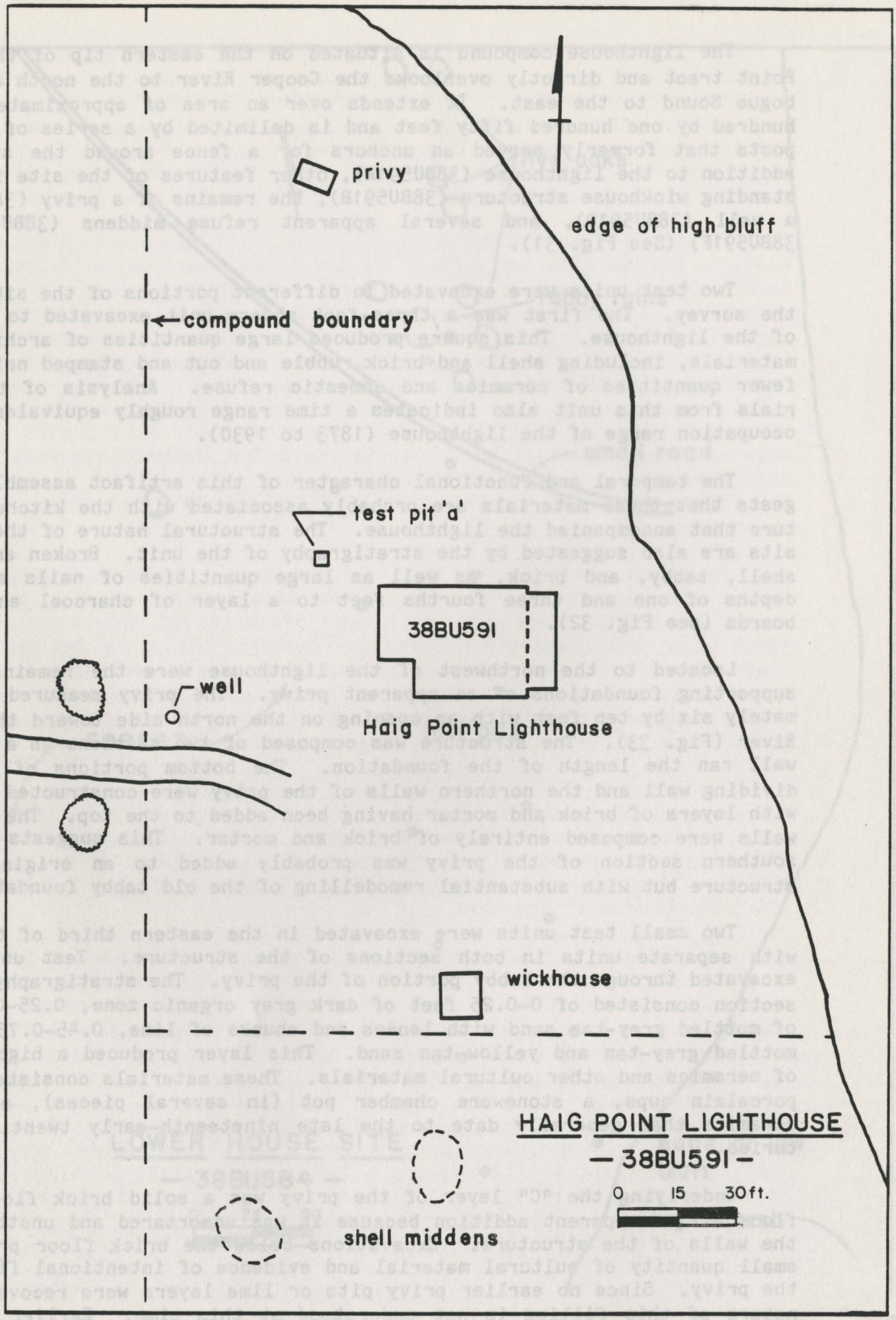
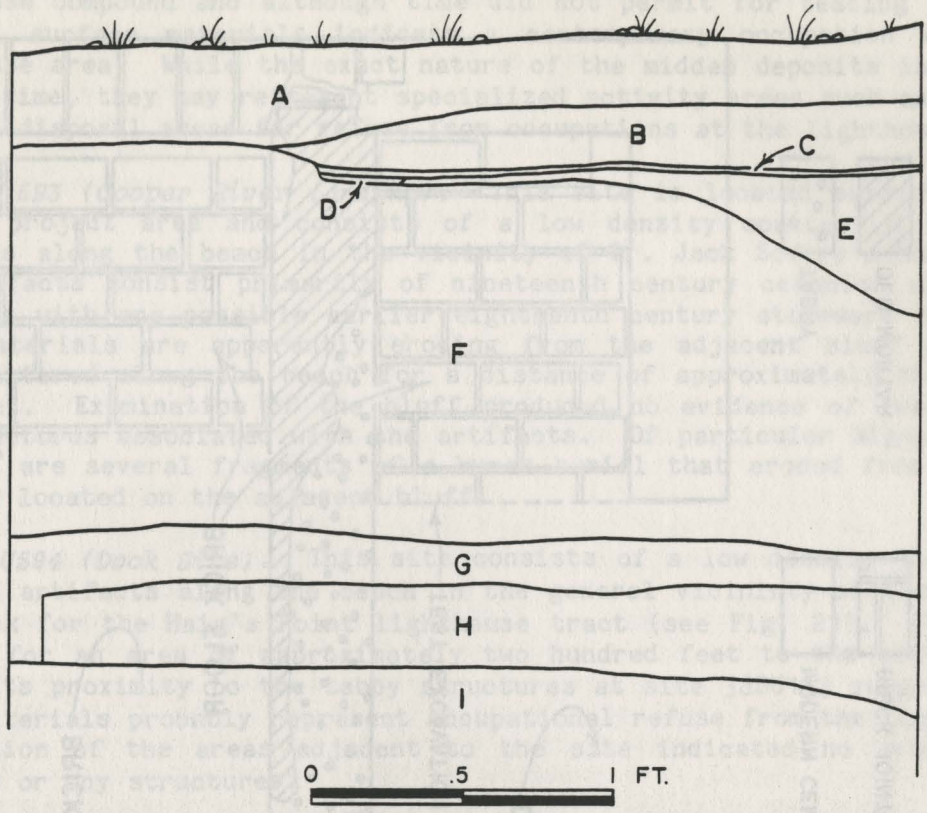


Figure 31: Haig Point Lighthouse and associated features.



A- LIGHT GREY SAND WITH CRUSHED SHELL
B- LIGHT BROWN SAND WITH SHELL
C- THIN BROWN SAND LENS
D- THIN RED LENS
E- LIGHT TO MEDIUM GREY SAND
F- LIGHT GREY SAND AND ASH LAYER WITH BRICK, TABBY, AND SHELL DEBRIS
G- CHARCOAL AND BURNED BOARDS
H- LIGHT GREY SAND WITH LOOSE, CRUSHED SHELL
I- DARK YELLOW-TAN SAND

Figure 32: Stratigraphy of test pit and Haig Point Lighthouse.

may exist in unexcavated portions of the privy, however, and the filling may be associated with the apparent renovation of the structure.

Test unit B, which was excavated in the southern portion of the privy, produced large quantities of brick rubble but no cultural materials. As with the northern section of the privy, a brick floor was uncovered at the bottom of the unit. This floor was located at a greater depth (1.50 feet), however, and no evidence of earlier deposits was recovered. This may indicate that the southern section of the privy was kept more sanitary.

Two shell refuse middens were located to the south of the lighthouse. These middens were situated in an area that was fenced off from the major

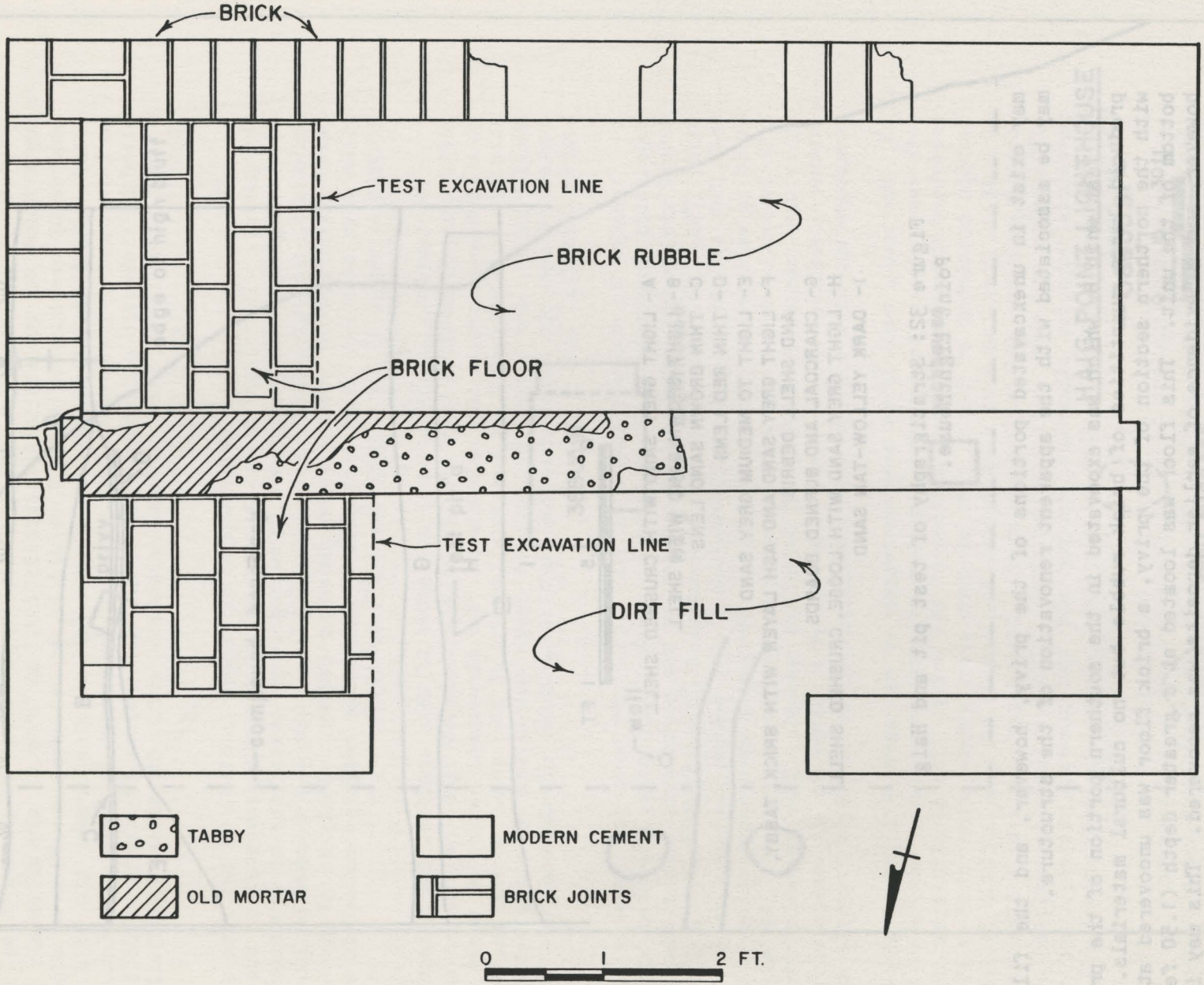


Figure 33. Plan view of Haig Point Lighthouse privy.

lighthouse compound and although time did not permit for testing of these middens, surface materials indicate a contemporary occupation with the lighthouse area. While the exact nature of the midden deposits is unknown at this time, they may represent specialized activity areas such as storage areas or disposal areas for refuse from occupations at the lighthouse.

38BU593 (Cooper River Landing). This site is located outside of the present project area and consists of a low density scatter of historic materials along the beach in the vicinity of Dr. Jack Scurry's boat dock. The artifacts consist primarily of nineteenth century ceramics and glass fragments with one possible earlier eighteenth century stoneware fragment. These materials are apparently eroding from the adjacent bluff and have been scattered along the beach for a distance of approximately three hundred feet. Examination of the bluff produced no evidence of features or any structures associated with the artifacts. Of particular significance, however, are several fragments of a human burial that eroded from a Black cemetery located on the adjacent bluff.

38BU594 (Dock Site). This site consists of a low density scatter of historic artifacts along the beach in the general vicininty of the present boat dock for the Haig's Point lighthouse tract (see Fig. 21). This site extends for an area of approximately two hundred feet to the west of the dock. Its proximity to the tabby structures at site 38BU153 suggests that these materials probably represent occupational refuse from the plantation. Examination of the areas adjacent to the site indicated no evidence of features or any structures.

38BU600. This site is located immediately south of the property line of the Haig's Point tract at the northwestern edge of the marsh. It is represented by a small "C" shaped tabby structure. It is situated in a young pine forest approximately forty feet from the marsh edge. The structure has internal dimensions of three feet with a wall thickness of ten inches. It is elevated approximately twenty-four inches above the ground surface; however, it is uncertain as to whether this tabby supported any additional structures. No cultural materials were observed or recovered from the site area.

38BU607. Located outside of the present project area, this site is represented by a small eroding oyster shell midden. The midden measures approximately two by two feet and has a thickness of two to three inches. Several clear bottle glass fragments with thread caps were recovered from the middens. These materials are indicative of twentieth century occupations of the area and are probably associated with the oyster industry on Daufuskie during the 1940s and 1950s.

38BU608. This site is located outside of the present project area and consists of a historic period shell midden. The midden is situated on the bluff overlooking the Cooper River and is being eroded away by the wave action of the river. It measures approximately thirty-five feet wide with a thickness of twelve to eighteen inches. The cultural material recovered from the midden consists of several brick fragments and whiskey and soft drink bottle fragments that date to the 1920s and 1930s.

38BU613. Located outside of the present project area, this site consists of a large oyster shell midden that is apparently associated with the Daufuskie oyster industry of the 1940s and 1950s. The shell deposits begin immediately south of the Cooper River Landing at a small tidal creek and extend southwest for a distance of several hundred feet. The thickness of the midden varies between two to five feet. At the base of the deposit is a well-formed humus layer representing the soil surface prior to the shell deposition. No cultural materials were observed or recovered from the site area.

38BU618. This site is located at the southern end of Daufuskie Island overlooking Mungen Creek. It is represented by a large oyster shell midden that originates on the mainland and extends well into the marsh. The lack of an organic zone over the midden suggests a relatively recent deposit; however, no cultural materials were observed or recovered from the site.

38BU620 (Webb Site). This site is located in the western portion of the Webb tract near the Bluff site, 38BU135 (Fig. 24). It consists of two tabby foundations and four shell refuse middens extending over an area of approximately two hundred by two hundred feet (Fig. 34). The most complete of the tabby foundations (38BU620A) is rectangular and appears to open to the southeast. It is composed of field stone and tabby and has a length of four and two-tenths feet with north and south wall lengths of two and two-tenths feet. Extensive probing in the vicinity of the structure indicated a scatter of debris along a thirty by forty foot area. Although this area was not tested, the presence of the foundation and the scatter of rubble suggest the possibility of a major structure. A small one square foot test unit was excavated directly adjacent to the tabby. This test excavation produced several architectural artifacts that indicate a post-1826 construction date for the structure (Mercer 1923; Nelson 1968).

A shell refuse midden was located twenty-five feet to the southwest of the tabby foundation. This midden measured approximately twenty-eight feet northeast-southwest by twenty feet northwest-southeast. A one square foot test unit was excavated in the summit of the midden, which indicated that the deposits have a thickness of eight inches. The cultural material recovered from the test consisted of several glass and ceramic fragments that dated to the nineteenth century. This suggests that the refuse midden is probably associated with the tabby structure at locus 38BU620A.

A second partial tabby foundation (38BU620C) was located sixty-one feet west of locus A (Fig. 34). Although fragmented, this structure was apparently composed of the same field stone and tabby mortar construction and rectangular configuration as tabby A. In addition, a small refuse midden was located one hundred twenty feet west of this structure. The midden measured approximately twenty-eight by sixteen feet with a north-south orientation of the major dimension. A one square foot test unit was excavated in the midden, but no cultural material was recovered.

Two additional shell mounds (38BU620E and 38BU620F) were located in the vicinity of the site (Fig. 34). The first, 38BU620E, measures approximately sixteen by twenty-five feet and contains extremely large oyster and whelk shells. Testing in the midden produced several brick and bottle

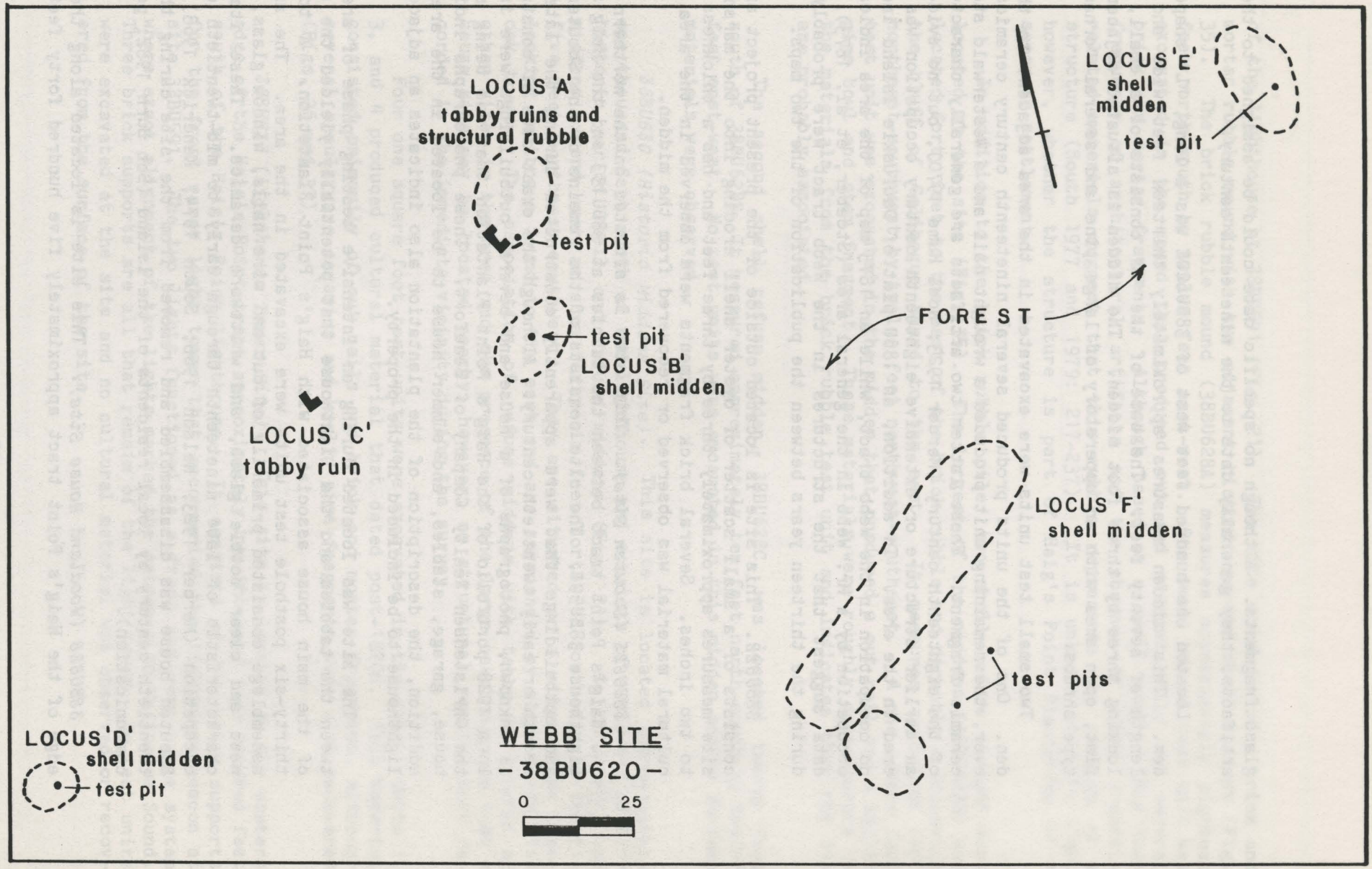


Figure 34. The Webb site.

glass fragments. Although no specific date could be assigned to the glass artifacts, they generally date to the nineteenth century.

Located one hundred feet west of 38BU620E was a long, "L" shaped midden. This midden measures approximately thirteen feet wide and has a length of seventy feet. The base of the "L" consists of a small, interlocking three by three foot midden. The midden is situated adjacent to a flat, open area with an upperstory of large pine and several "ornamental" type shrubs.

Two small test units were excavated in the area adjacent to the midden. One of the units produced several nineteenth century ceramics; however, the remaining unit produced a wrought nail and a Westerwald stoneware ceramic fragment. These latter two artifacts are generally characteristic of the eighteenth century (Mercer 1923; Noel Hume 1970), but no evidence of an earlier structure or extensive eighteenth century occupation was recovered in the area. In addition, an 1860 plat of Daufuskie Island indicated no occupation in the Webb tract, while an 1873 map of the area indicates an occupation by a Mr. Webb in the general area (Stoeber, et al. 1873). These data suggest that the structures in the Webb tract were probably built during the thirteen years between the publication of the two maps.

38BU622. This site is located outside of the present project area and consists of a small scatter of oyster shell eroding into the marsh. The site measures approximately three by three feet and has a thickness of one to two inches. Several brick fragments were observed in the area but no cultural material was observed or recovered from the midden.

38BU625 (Scouten Site). This site is situated on the northern end of the Haig's Point tract between the tabbies at 38BU153 and the Haig's Point Lighthouse 38BU591. The site consists of the remains of the Scouten house and outbuildings that were apparently constructed during the late nineteenth or early twentieth century. Although the exact date of construction is unknown, photographs of a house and several outbuildings were included in a 1928 portfolio of the Haig's Point Plantation that was being sold by the Christensen Realty Company of Beaufort. These photographs indicate a house, garage, stables, and summer house to be located in the area. In addition, the description of the plantation also indicates an adjacent old lighthouse to be included in the property.

The site was located during an intensive testing phase of areas between the tabbies and the lighthouse that potentially yielded the remains of the main house associated with Haig's Point Plantation. A total of thirty-six posthole test units were excavated in the area. The artifact assemblage consisted primarily of cut and wire nails, window glass, manganese and clear bottle glass, and whiteware ceramics. These items are characteristic of late nineteenth through early to mid-twentieth century occupation (Mercer 1923; Nelson 1968; South 1974; Kendrick 1968). The Scouten house was disassembled and removed from the site during the mid-twentieth century by local residents of the island (Bob Burn 1982: personal communication).

38BU628 (Woodland House Site). This site is located along the bluff edge of the Haig's Point tract approximately five hundred forty feet south

of the lighthouse at 38BU591 (Fig. 21). The site consists of a brick and mortar rubble mound with two adjacent historic period shell middens (Fig. 35). The brick rubble mound (38BU628A) measures approximately eighteen feet north-south by twelve feet east-west. One small shovel test unit was excavated in the mound that produced cut and stamped nails and several brick and mortar fragments. Although based on a small sample, this high frequency of architectural artifacts and the absence of other domestic related materials suggest that this rubble represents the remains of a structure (South 1977 and 1979: 217-237). It is unknown at this time, however, whether the structure is part of Haig's Point Plantation or a separate settlement.

In addition to the brick rubble pile, two shell refuse middens were located at the site (Fig. 35). The largest of the middens (38BU628B) was located forty feet to the east of the brick rubble and directly overlooking the bluff of Calibogue Sound to the east. It measures seventeen feet northeast-southwest by twelve feet northwest-southeast. A one square foot test unit was excavated in the midden that produced a cut nail and a kaolin pipe bowl and stem fragment. These materials were roughly contemporary to the materials from the brick rubble test unit and indicates that the two are probably associated.

The second shell refuse midden, 38BU628C, was located twenty feet south of 38BU628B. It measured approximately ten feet north-south by twelve feet east-west. No test units were excavated in this midden and no surface materials were observed.

38BU630 (Historic Middens Site). This site is located approximately one thousand feet south of the lighthouse and consists of a cluster of five historic period shell and refuse middens (Fig. 21). Collectively, the middens extend over an area forty-six feet northwest-southeast by twenty-five feet northeast-southwest. They are situated on a ridge slope overlooking Calibogue Sound to the east and are surrounded by eight large live oak trees. The association of refuse middens with tabby structures at other sites in the area and the presence of the large oaks suggests that a house site may be located nearby; however, no structural remains were recorded in the immediate vicinity during the survey.

Four one square foot test units were excavated in the site. Units 1, 3, and 4 produced cultural material that dated post-1820s. This material consisted primarily of cut nails and brick and mortar fragments, although several annularware ceramics and kaolin pipe fragments were also recovered (Figs. 36 and 37).

38BU633 (Lighthouse Tower Site). This site is located on the eastern edge of the Haig's Point tract approximately two thousand five hundred feet south of the Haig's Point lighthouse. It consists of the brick supports for the front range light tower that accompanied the lighthouse beacon at site 38BU591. The two lights functioned as a front and rear range system where exact alignment of the lights marked the entrance to Calibogue Sound. Three brick supports are all that remain of the light tower. No test units were excavated at the site and no cultural material was observed or recovered from the surface of the site.

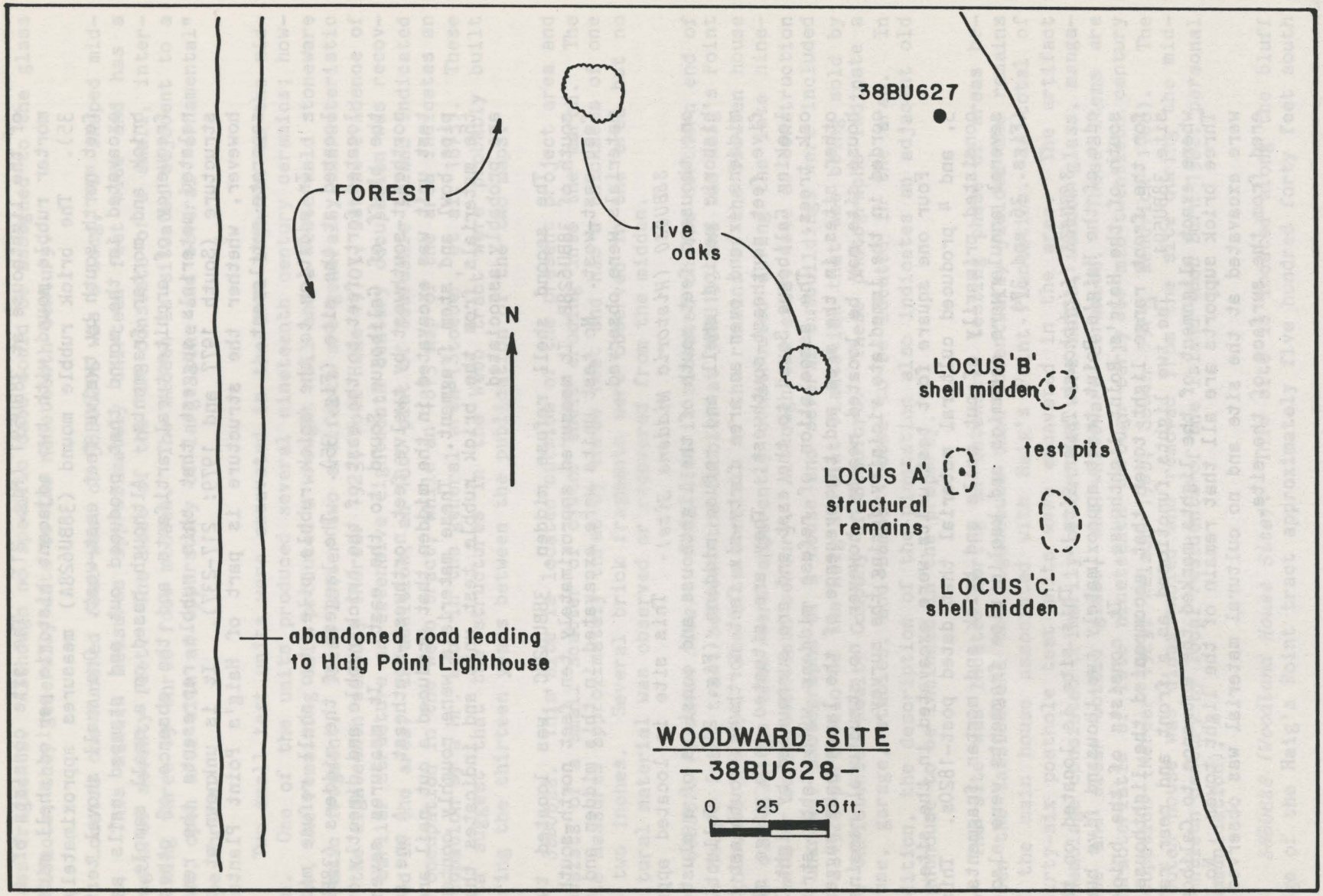


Figure 35. The Woodward site.

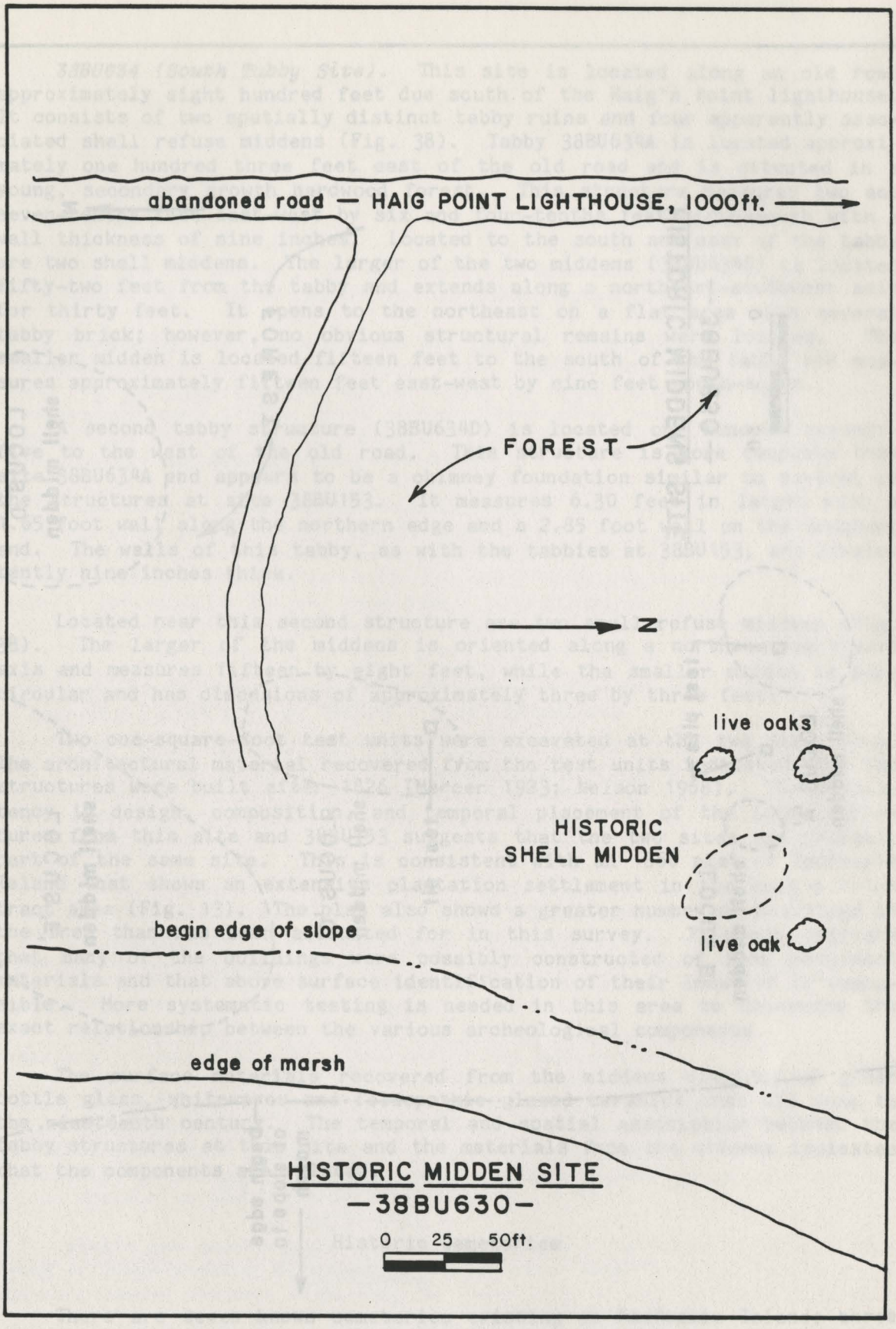


Figure 36: Historic Middens site, 38BU630, and associated features.

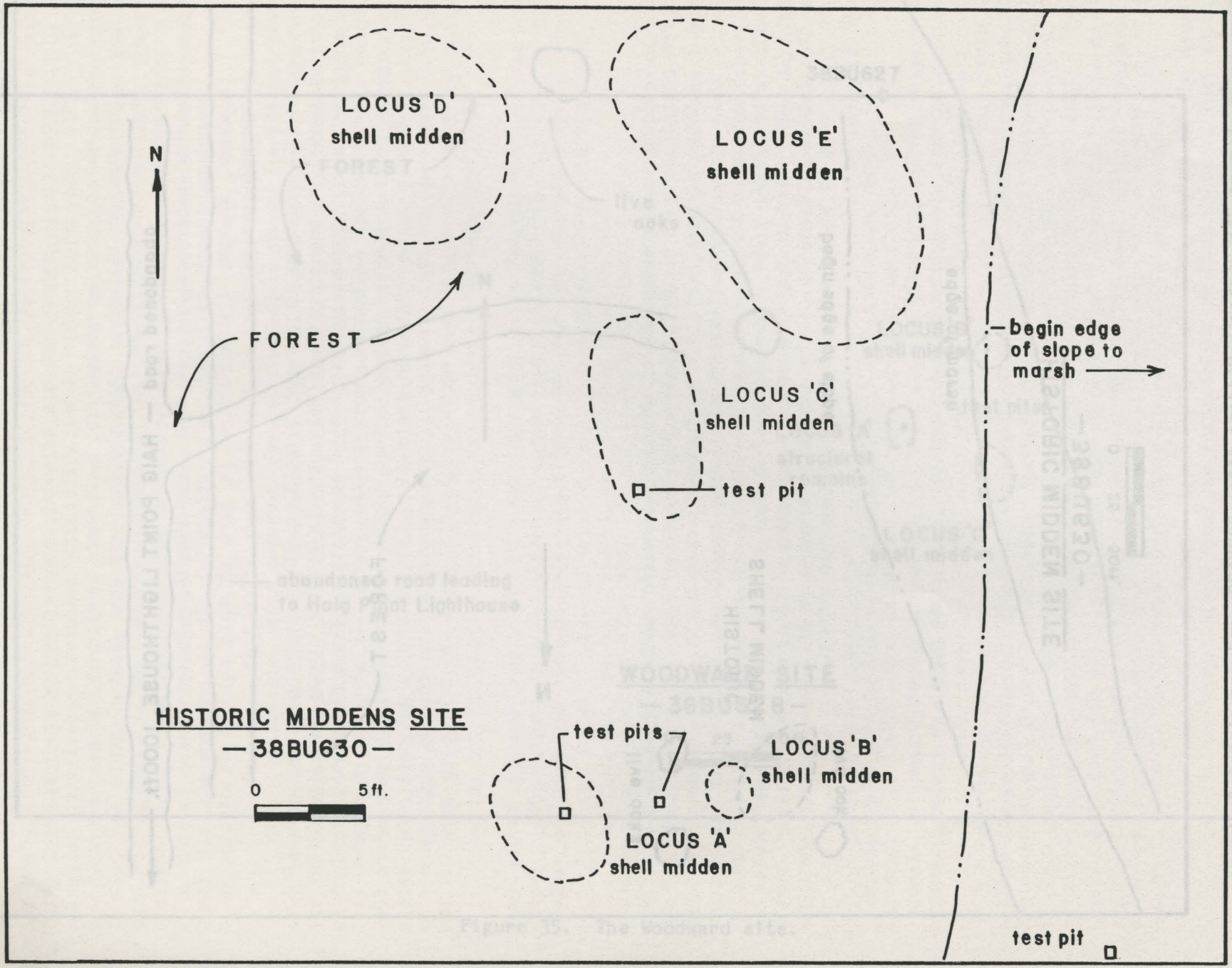


Figure 37. Historic Middens site.

38BU634 (South Tabby Site). This site is located along an old road approximately eight hundred feet due south of the Haig's Point lighthouse. It consists of two spatially distinct tabby ruins and four apparently associated shell refuse middens (Fig. 38). Tabby 38BU634A is located approximately one hundred three feet east of the old road and is situated in a young, secondary growth hardwood forest. This structure measures two and seven-tenths feet east-west by six and four-tenths feet north-south with a wall thickness of nine inches. Located to the south and east of the tabby are two shell middens. The larger of the two middens (38BU634B) is located fifty-two feet from the tabby and extends along a northeast-southwest axis for thirty feet. It opens to the northeast on a flat area with several tabby brick; however, no obvious structural remains were located. The smaller midden is located fifteen feet to the south of the tabby and measures approximately fifteen feet east-west by nine feet north-south.

A second tabby structure (38BU634D) is located one hundred seventy-five to the west of the old road. This structure is more complete than site 38BU634A and appears to be a chimney foundation similar to several of the structures at site 38BU153. It measures 6.30 feet in length with a 1.65 foot wall along the northern edge and a 2.85 foot wall on the southern end. The walls of this tabby, as with the tabbies at 38BU153, are consistently nine inches thick.

Located near this second structure are two small refuse middens (Fig. 38). The larger of the middens is oriented along a northwest-southeast axis and measures fifteen by eight feet, while the smaller midden is more circular and has dimensions of approximately three by three feet.

Two one-square-foot test units were excavated at the two structures. The architectural material recovered from the test units indicated that the structures were built after 1826 (Mercer 1923; Nelson 1968). The consistency in design, composition, and temporal placement of the tabby structures from this site and 38BU153 suggests that the two sites are probably part of the same site. This is consistent with an 1860 plat of Daufuskie Island that shows an extensive plantation settlement in the Haig's Point tract area (Fig. 13). The plat also shows a greater number of buildings in the area than has been accounted for in this survey. This may indicate that many of the buildings were possibly constructed of less permanent materials and that above surface identification of their location is impossible. More systematic testing is needed in this area to determine the exact relationship between the various archeological components.

The surface materials recovered from the middens consists of green bottle glass, whitewares and feldspathic glazed ceramics that all date to the nineteenth century. The temporal and spatial association between the tabby structures at this site and the materials from the middens indicates that the components are related.

Historic Cemeteries

There are seven known cemeteries existing on Daufuskie Island; three are related to the small White occupation and the remaining four are asso-

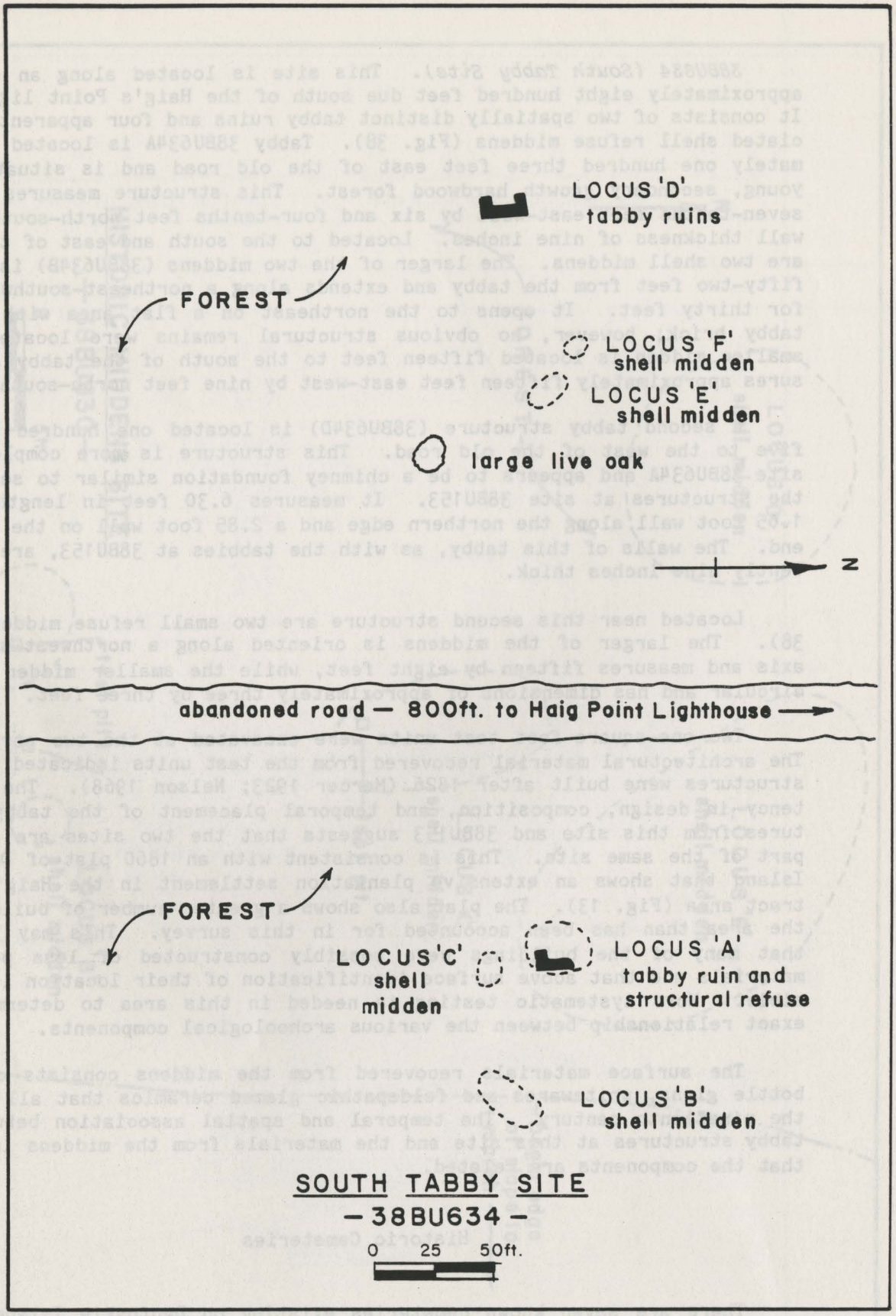


Figure 38: South Tabby site, 38BU634, and associated features.

ciated with the Black communities. Perhaps the earliest cemetery is the Mary Dunn cemetery located at the southern end of the island. This site contains members of the White community that used the land during the eighteenth and nineteenth centuries, and who were associated with plantation systems. These graves are well marked with either sandstone or limestone headstones. Each grave is oriented in an east/west direction and arranged in a linear fashion. The other two graveyards are small and less is known about them because of erosion, land alteration, and the absence of markers. Mrs. A. L. Burn, the Postmaster of Daufuskie Island, is assembling information about these cemeteries, in addition to others.

The Mary Field's cemetery is the largest of the Black community. The cemetery is located at the Cooper River Landing and is also large. The other two are small judging by the number of markers, but several residents assert that many graves exist without headstones, which is supported by oval-shaped depressions in the vicinity of the marked graves. Grave goods occasionally accompany the depressions.

The burial practices of coastal Blacks have been noted by Parsons (1923), Wightman and Cate (1955), and Combes (1972). These patterns of burial are: graves without markers; an absence of linear burial arrangements; lack of association with churches; multiple burials in a single grave; individuals buried face-down; communications with the spiritual world; burial of money and personal items; deceased buried with the spirits of other family members; insignificant care of burial plot; deposition of bodily items such as hair, finger-nail clippings, and teeth on the grave; placement of material cultural on the grave.

Most conspicuous in these patterns on Daufuskie Island is the placement of personal items on graves, nonsystematic interment, the absence of grave markers, and the lack of association with churches. These patterns were seen at Mary Field's, Cooper River Landing, Robert Byran, and Haig Point cemeteries.

38BU592 (Haig Point Cemetery). This cemetery is located about two thousand feet southeast of the Haig Point Lighthouuse, and about fifty feet east of the main dirt road traversing the island. This cemetery has been used since the beginning of the twentieth century, and perhaps earlier. There are no indications that it was utilized by anyone other than Blacks.

Residents state that many graves exist without headstones and that the cemetery is very old. While the age of the cemetery is not known, at least one of the individuals was born in 1834 and two others were born immediately after the Civil War. Oval-depressions substantiate the information about unmarked graves. It is possible that the cemetery is connected with the Haig plantation. The age is unknown, but oval-shaped depressions substantiate the information about unmarked graves. Several of these depressions contain personal grave items (Fig. 39).

Within the cemetery there are only six inscribed markers: Kate Holmes, July 4, 1868-December 9, 1945; John Stafford, 1888-1944--"He has kept the faith"; Samuel Holmes, died June 8, 1969; Anne R. Mills, born 1866, died Aug. 17, 1917; Mrs. Andres Porp...(?), June 25, 1919, 85 years of age; May Hamilton, Co. B, 21 U.S.C.I. An additional marker is represented by a

Figure 39: Grave goods at the Haig Point Cemetery, 38BU592.

marble table top, and another in the form of pipe driven into the soil. Grave goods were noted on several graves: pitches, vases, medicine bottles, bowls, glasses, whiskey bottles, the frame of a metal clock, a coffin handle, a tea pot, and a porcelain jar. The area has not been maintained and as a result it is well forested and overgrown.

38BU619 (Robert Bryan Cemetery). This small cemetery is located approximately thirteen hundred feet north of the telephone communication tower on the main dirt road and sixty feet east of the road. The cemetery is positioned immediately in front of two large gate posts that provide entry into a small road leading to the Bluff Site. The environment is represented by small laurel oaks and pines and a patch of open ground covered by straw. In the midst of the straw there is a single inscribed grave marker (Robert Bryan, July 19, 1892, July 1, 1960) and an inverted stone slab with no inscription. Several bottles and a highly deteriorated metal container are positioned in proximity to both graves. Oval-shaped depressions were in the area, but without grave goods. Mrs. A. L. Burn stated that there are additional graves. There are no patterns to the burials, except that there are no churches. The age of the cemetery is unknown.

38BU624 (Crypt Cemetery). This cemetery is located at the southern edge of the Haig Point Tract at the intersection of the east road from the Lighthouse and a small road that forms the east/west boundary of the property. The remains of a small cemetery once associated with a White community church constitutes the site. Mrs. A. L. Burn has stated that a large

brick crypt once stood at this location, but was later removed and taken to Savannah, Georgia. In the area pointed out by Mrs. Burn, there is a large hole measuring ten feet square and four feet deep, presumably the location of the brick structure.

There are several depressions in the area, probably burials. The area was tested with a posthole digger at ten-foot intervals for fifty feet. The test failed to yield materials, but soil profiles showed tan and light brown sands below the humus layer. A single hole was placed in one of the depressions to two feet. The soil was mottled, suggesting a grave, though no material was found. The other depressions are probably burials.

No remains of the church were found. The ages of the cemetery and church are unknown.

38BU611 (Cooper River Landing Cemetery). This Black graveyard is situated immediately south of thhe Cooper River Landing on a high sandy bluff overlooking the Cooper River. Portions of the cemetery are eroding into the river. At least one human burial has fallen onto the beach.

There is no arrangement to the graves; there are grave goods; there is no church; there is much forest growth. Several oval-shaped depressions are near the marked graves. The age of the cemetery is unknown, but many grave inscriptions suggest interment after the late 1800s.

38BU643 (Mary Fields Cemetery). This Black cemetery is the largest on the island. There are forty-nine inscribed markers in the graveyard. Birth dates cluster around the late 1800s and early 1900s. Very few birth dates are associated with post Civil War period.

Oval-shaped depressions are near the marked graves. The Mary Fields graveyard is the only Black cemetery that relates epitaphs to family members: introductory epitaphs read "Son," "Mother," "My Husband," etc.; and summary epitaphs read "Asleep in Jesus," "At Rest," "Gone But Not Forgotten," and "God Loves This Child."

Government granite markers showed military service and death dates, but not birth dates. Three markers showed only the name, and three inverted slabs had no inscriptions.

There were a few grave goods: bottles, vases, broken pitches, shattered carnival glass, and occasional flower pots. A recent interment, marked by extensive flower arrangements and wreaths, also contained a cardboard clock showing the time of death. This is probably related to the practice of placing clocks on earlier graves, such as the case at the Haig Point cemetery.

38BU645 (Mary Dunn Cemetery). Located outside of the project area at the southern end of the island near Mungen Creek, this is an early White graveyard associated with plantation systems and other occupations during the nineteenth and twentieth centuries.

The cemetery has been well maintained and is surrounded by a wire fence. The graves are oriented in an east/west direction with linear place-

ments extending in a north/south direction. Family plots are marked and there are no oval-shaped depressions suggesting additional graves. The markers appear to be either limestone or sandstone, with the names, birth and death dates, epitaphs, and the age of the individual outlined in terms of years, months, and days. Summary epitaphs are usually extensive when they occur, and describe love and admiration for the deceased and specific contributions to the family. The introductory epitaphs vary through time: the earlier graves are inscribed, "Sacred To The Memory Of," and the later graves read, "In Memory Of." Specific family relationships are noted only twice and appear as, "Father" and "Our Mother." There is a single notation to spouse, "...wife of...."

There is a large brick crypt possibly dating to the late 18th century. Although there is no plaque or marker, Bob Burn (personal communication) states that the crypt was constructed for Phillip Martinangele and another family member. There are two cast iron coffins and disturbed skeletal remains inside the crypt. If this crypt is related to Phillip Martinangele, then it probably dates to the late 1700s.

38BU644. Little is known about this graveyard. Mrs. A. L. Burn, states that the cemetery is associated with an early White community dating to the late 18th and early 19th century. Many of the markers have eroded and the general area has suffered from land alteration that displaced and buried gravestones. This area was not visited, but it was recorded for future investigations.

Sites of Potential Significance

Haig Point Tract

The most significant sites on the Haig Point Tract are the tabby structures located west of the Lighthouse. These structures were built during the early to mid-1800s and are the only remains of an argicultural plantation left on the island. More information could be retrieved shedding light on slaves from these structures, and determining the amount of sustenance provided by the plantation system versus that from the natural environment. The shell middens that occur within and outside of the tabbies can reveal patterns of refuse disposal by studying the food remains and cultural materials, exposing the activities of slaves. Some of the differences in the structures may relate to social stratification--some of the other structures for the overseers, and some for the slaves. These differences relate to form and function, suggested not only by the differences in structures, but also in disposal patterns, such as the absence of shellfish remains in the interior of what may have been a wooden structure with an attending tabby chimney. Perhaps some of these dwellings had wooden floors and some had earthen floors.

There is a prehistoric component in the form of a midden underlying at least one of the tabbies. The spatial extent of the component is presently unknown. Although the area was extensively probed with a metal rod, the spatial extent of historic and prehistoric shell middens cannot be separated. Aboriginal pottery sherds lying in the sand at the base of an un-

disturbed shell midden would argue for the site's integrity and could yield more information about the Middle Woodland period. The prehistoric component's spatial association with the historic occupation provides additional significance to this location.

The Haig Point Lighthouse (38BU591) is registered in the National Register Historic District (Starr 1981: 7). Constructed in 1873, the lighthouse served as a navigational reference point in conjunction with another tower located to the southeast. A privy was found to the west, and shell middens to the east. The middens occur within the small compound beside the wick house and may relate to an earlier occupation of the Lighthouse. Preliminary testing of the privy revealed faunal remains and cultural materials, which relate to the late nineteenth and early twentieth centuries. This old privy can provide information on patterns of disposal and subsistence. Floral remains may also be present.

A test pit placed behind the lighthouse revealed a thick layer of oyster shells, brick fragments, and a layer of burned boards, all of which suggest the presence of a former structure. The exact nature of this deposit is currently unknown, but additional investigations may determine its relationship to the present structure, or perhaps an association with the earlier plantation system.

The shell midden, even though it has not been investigated, may provide information about subsistence systems during the occupation of the lighthouse. This area is significant in terms of its historic occupation on Daufuskie Island.

The areas southeast of the lighthouse form a complex of historic and prehistoric sites that are not well understood in terms of spatial and temporal associations. These sites are house foundations, shell middens, and non-midden prehistoric sites, most of which have yielded cultural materials. Although little is known about this area it may be important in reference to the Haig Point plantation system. Cultural materials recovered from the Woodward site (38BU628) and the South Tabby site (38BU34) show contemporaneity with those found at the tabby structures (38BU153). The historic middens (38BU630) also yielded cultural materials, suggesting a temporal association with those sites. These various historic occupations are significant because they may relate to the Haig Point plantation system during the 1800s, because they may reflect a succession of plantation growth, and because they may reveal a separate plantation system coexisting with Haig's Point. Such determinations are difficult to establish at present, but further studies at these sites could reveal more data about the historic period on Daufuskie Island.

The Lower House site (38BU584) is somewhat limited as a historic component even though brick foundation ruins are present with what appears to be tabby mortar. No shell middens or other structures were found. The prehistoric component covers a large area with ceramics, which occur in a non-shell midden context, from the Middle and Late Woodland period. Oyster shell, charcoal, and animal bone were also found in context with the pottery sherds. This site is significant because it is one of the few examples of a non-midden site discovered during the survey. The preservation of food remains and charcoal association with the site can add to the sub-

sistence data, and ceramic distribution can provide information about intrasite patterning and specific activity areas.

The cluster of three shell middens (38BU586, 38BU587, 38BU588) located in the marsh at Calibogue Sound are also significant because they are intact and deep. Currently, the duration of occupation and the cultural components are unknown; however, these middens have potential information about their spatial dimensions because of the lack of erosion.

Webb Tract

There are at least four sites that are significant within the Webb Tract: 1) Bluff site (38BU135), 2) Webb site (38BU620), 3) Periwinkle Midden (38BU615), and 4) Rabbit Point Shell Midden (38BU136). The most significant prehistoric occupation is the Bluff site. Pottery sherds, lithic artifacts, and human cremations indicate that the site was occupied almost continuously for at least 3,500 years. Spatial dimensions in excess of two acres, combined with deep and intact shell deposits, indicate an exceptionally large occupation. Shell refuse accumulated heavily during the Woodland period in the subsurface soils, but the later Mississippian period occupation is apparently responsible for the large middens that cover a large area of the site. With this temporal and spatial diversity, cultural continuity, and high degree of integrity, the site has an excellent opportunity to contribute to the knowledge of coastal adaptation and resource use for the past several millennia. Additionally, the discovery of charred human remains shows that people during the later occupations may have remained at the site for extended periods of time, which strongly suggests the existence of a village. Based on these observations, a lot of information can be retrieved from the Bluff site, information about chronologies, subsistence and intrasite settlement patterns, and bone, ceramic, and lithic technologies.

The Periwinkle Midden is unique because it is one of the few periwinkle deposits noted in coastal South Carolina. A near absence of cultural materials makes temporal associations difficult, but reports of stemmed bifaces and pottery sherds would indicate either an Early Woodland occupation or continuity through time. However, the association of stemmed bifaces with pottery sherds and a midden, which is predominantly composed of periwinkle shells, would tend to indicate a relatively brief episode of occupation during the Early Woodland because there was a correlation between intrasite deposits of periwinkle and Early Woodland materials observed during the survey of Port Royal Sound and the Broad River (Michie 1980). In every case, Thom's Creek and fiber-tempered pottery sherds coexisted with discrete clusters of periwinkle shells and stemmed bifaces characteristic of Late Archaic/Early Woodland periods. This is certainly not conclusive evidence, but it is sufficient for a temporal association. Although the edges of the midden have suffered some erosion, the interior is intact and exhibits twenty-four inches of undisturbed shell deposits, maintaining the site's integrity.

The Rabbit Point Shell Midden is intact and undisturbed. The cultural materials recovered from the eroded beach deposits show Middle and Late Woodland occupations.

Oak Ridge Tract

There are few archeological sites within this tract. A survey of all roads, paths, and disturbed soils, in addition to a testing program at freshwater marshes, did not reveal any evidence of historic and prehistoric occupations. Available historic documents and maps also failed to show settlements within this area. The area is low with excessive amounts of water-saturated soils.

The Cemeteries

There are three cemeteries on the tracts of land considered for development: 1) Haig's Point Cemetery (38BU592), 2) Crypt Cemetery (38BU624), and 3) Robert Bryan Cemetery (38BU619). The Haig's Point Cemetery is the most significant. As Moratto and Kelly (1978) state, "A cultural resource that holds religious, mythological, spiritual, or other symbolic importance for a discrete group of people is said to be ethnically significant...Many ethnic groups (such as Blacks) have been so excluded from written histories and traditional concepts of national identity that their cultural past is often preserved more in the earth than in documents... scientific and other values may be so intertwined with ethnic significance that cultural resources may be significant even when the group that produced them cannot preserve them, becomes indifferent, or ceases to exist." In the framework of contemporary developments, such as the alteration and modification of a coastal island, and the subsequent effects on local communities, there is an inherent probability that Black culture will be affected. The effect of outsiders moving into a closed community will subsequently affect contemporary norms and values and change cultural customs, such as burial practices. The grave goods at the Haig's Point Cemetery should remain unaffected and protected by proposed developments. The cemetery at Cooper River Landing once contained a large inventory of personal grave items, but it has largely been destroyed. This should serve as a stimulus for protecting the grave goods at Haig's Point, the cultural practice of placing personal items on a grave.

Recommendations

Haig Point Tract

Based on the reconnaissance survey and analysis of materials, the following sites are significant: 1) Haig Point Tabby Complex (38BU153), 2) Haig Point Lighthouse (38BU591), 3) Woodward site (38BU628), 4) Historic Middens (38BU630), 5) South Tabbies (38BU634), 6) Lower House site (38BU584), and 7) Shell Midden Complex (38BU586, 38BU587, 38BU588). The following recommendations are strategies designed to deal with these cultural resources.

The Haig Point Tabby Complex is large and complicated, and it cannot be thoroughly understood by simply excavating portions of the structures. Large areas of the adjacent cultivated field should be subjected to a sampling program to address fully the form and function of the settlement.

For example, specific activity areas are probably located in the vicinity of the tabbies, i.e., trash disposal pits, graves, storage facilities, animal pens, privies, and other structures. The testing program would be designed to locate these features. Concomitant with the field testing, preliminary testing in and around both forms of tabbies (walled structures and isolated chimneys) should be investigated, along with the prehistoric component. A testing program on this level of investigation is not a form of mitigation, but rather an attempt to understand the historic and prehistoric components. Such an understanding is a prerequiste for the final stage of investigation, the mitigation of adverse effects.

The Haig Point Lighthouse, according to the sponsors, will remain unaffected by current plans for construction. However, a thorough investigation of the privy should be made in the event of construction or other forms of land alteration. Additionally, the shell middens located in the compound to the east of the wick house should be tested in the event of destruction.

The Woodward House, Historic Middens, and the South Tabbies should also be subjected to a program of intensive testing through systematic sampling to acquire a better knowledge of their temporal and spatial dimensions. Testing would also allow an assessment of the relationship between this site and other historic sites within the area, and it would establish their significance.

The Lower House site and its prehistoric component should be investigated through a systematic sampling of the area to determine site boundaries, temporal relationships, and significance. The remains of the historic structure should also be investigated through sampling designed to extract a maximum amount of information with a minimum effort.

The Shell Midden Complex should be sampled with a narrow trench excavated through each deposit, or a series of small test pits strategically located in these linear deposits. Stratified sampling could also be implemented.

Webb Tract

Sites of potential significance within the Webb Tract are: 1) Bluff site (38BU135), 2) Rabbit Point Shell Midden (38BU136), 3) Periwinkle Shell Midden (38BU615), and 4) Webb site (38BU620). The following strategies are suggested in order to determine their significance.

The Bluff site is the largest prehistoric site within the project area and should undergo the following: 1) thorough mapping of the site, 2) intensive testing through stratified unaligned sampling of the midden area, and 3) stratified unaligned sampling of areas beside the midden. Sampling of the midden would provide temporal and spatial dimensions and specific information regarding cultural materials and food remains. A sampling of the peripheral areas would be designed to recover information about the existence of structural remains of a village and its associated activity areas.

Both the Rabbit Point Shell Midden and the Periwinkle Shell Midden should be exposed to sampling through testing. A series of linear test pits should be arranged strategically in order to recover cultural materials and subsistence data, in addition to temporal and spatial information.

The Webb site should be treated in a fashion similar to the historic sites on the Haig Point Tract, i.e., unaligned systematic testing designed to reveal other cultural components and activity areas within the settlement. The testing program should include an investigation of the shell middens and the remains of the collapsed structure.

Haig Point Cemetery

This cemetary should be protected from vandals. The following is recommended: 1) an assessment of the total number of individuals buried in this graveyard, 2) an attempt to record the known individuals and their date of death, and 3) an enclosure designed to prevent vandalism of this cultural resource. Oral histories and interviews could reveal a lot of information about the personal items on the grave. A program designed to reveal other graves should also be implemented. As Combes (1974) has pointed out, grave goods are occasionally buried in the back dirt and subsequently may suffer destruction in the event of topographic alteration. This site has a potential for contributing knowledge about the past.

Other Considerations

The reconnaissance survey and analysis of sites determined a settlement pattern for prehistoric site location. Shell midden and non-midden sites tend to be situated on the peripheral zones of the island in association with well-drained soils. There is a high incidence of sites with Wando soils, especially in areas fronting salt marshes, tidal creeks, and other forms of navigable water. The area in the vicinity of the Lower House site appears to be archeologically sensitive, capable of yielding additional occupations immediately south and west of this location. A one- or two-day testing program would be an excellent means of preliminary investigation.

Such potential also exists in the vicinity of the Bluff site and the Rabbit Point Shell Midden, an area rich with archeological deposits. The area of consideration involves the well-drained Seewee soils in the vicinity of the planned boat harbor. Although this was scanned during the survey, we were unable to implement subsurface testing because of excessive rain and wet soils. This area could be tested efficiently in one or two days with aligned sampling.

Summary

All of the archeological sites are significant, and various approaches in assessing significance have been recommended. Exceptionally large areas should be dealt with by establishing a sampling universe and implementing stratified unaligned test units. This procedure allows the archeologist to

construct a density map with the assistance of a computer. Such a testing/mapping program will allow the identification of activity areas not visible to the naked eye. As this strategy is designed to locate components in large areas, specific testing within smaller areas will allow the detection of site-specific materials and provide information concerning time periods, subsistence, technologies, and questions relevant to research design. In smaller sites, such as the Periwinkle Midden, stratified unaligned sampling is impractical, and a series of small test units to address their importance is recommended.

While specific recommendations have been set forth for the Haig Point cemetery, the remaining cemeteries, although small and without grave goods, should be extended similar considerations prior to development. Questions regarding size, time and individuals should be addressed. This information may be lost forever if it is not retrieved.

Three cemeteries in the project area were not located; there may be additional graveyards. Contractors should be alerted to this possibility with the recognition of specific items in wooded area, e.g., clusters of bottles, vases, dishes, cups, saucers, drinking glasses, and other household items. In the absence of headstones, inverted but unmarked slabs of marble or cement may also be expected to exist with personal items.

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APPENDIX A

CREMATED HUMAN REMAINS FROM THE BLUFF SITE (38BU135), DAUFUSKIE ISLAND, SOUTH CAROLINA

Introduction and Site Overview

The Bluff Site (38BU135) is an archeologically complex, multi-component habitation site on the northwestern side of Daufuskie Island, South Carolina. It is comprised of a series of undulating shell and refuse middens with below grade shell deposits and covers an area of approximately two and one half acres. Shell deposits range in depth from three feet to six inches. The site is situated on a bluff approximately twelve feet above the surrounding marsh and is bordered on the western edge by a tidal creek. Vegetation on the site is a mature forest made up of live oak, mulberry, hickory, yaupun holly, wax myrtle, cedar, palmetto, yucca or spanish bayonet with loblolly pine on the periphery. Wando is the predominant soil type of the site and provides for excellent drainage of surface water. A small spring on the northern edge of the site is the nearest source of fresh water.

Human occupation of 38BU135 is demonstrated by a broad range of aboriginal ceramic types. Fiber-tempered pottery is the earliest type found and dates to the Late Archaic-Early Woodland period of about 3,800 B.P. The temporal range of the ceramics on the site continues to the Late Mississippian period of 1600 to 1500 A.D. The site has been frequently visited by relic collectors over the years, and artifacts reported to have come from the site include bifaces, scrapers, abrading stones, ceramic disks, bone and shell tools, as well as a large quantity of pottery.

The Institute of Archeology and Anthropology at the University of South Carolina was first contacted regarding the Bluff site in the summer of 1976. Dr. Robert L. Stephenson, Director of the Institute and State Archeologist, visited and recorded the site in July of that year. The site is now under the stewardship of the Daufuskie Island Land Trust Corporation and was surveyed as part of the general archeological survey, conducted by the Institute of Archeology and Anthropology, of the land holdings of the Daufuskie Island Land Trust Corporation, during July 1982.

Method of Recovery

In August 1981 a large number of fragmented human bones were seen to be exposed and scattered down the face of an eroding sandy bank into the marsh on the south side of 38BU135. They were recognized as the remains of a human cremation and the Institute of Archeology and Anthropology was notified. James L. Michie, archeologist with the Institute, suggested several means of removing the remains, and to prevent further damage to the remains by weathering and wash, recommended that they be recovered as soon as possible.

On August 20, 1981, myself, Mary K. Taylor of Hilton Head Island, South Carolina, and G. Scott Kinsey of Savannah, Georgia, removed the remains from the site. After clearing the area of leaves, twigs, and other surface debris, the fragments of bone were exposed using brush and trowel. Distribution of bone vertically was four feet, eight inches and horizontally eighteen inches at the greatest width on the face of the bank. The eroding profile had a slope of about forty-five degrees.

The greatest concentration of fragments was at the top of the distribution with a diminishing number of fragments as they spread down the bank. In the area of greatest concentration, the fragments had a depth of one and a quarter inch. The remainder of the bone was entirely on the surface. It appears the burial was exposed as a result of that section of bank being used as a pathway for access to the marsh, and predictably, many fragments were crushed due to the traffic. A fossilized shark's tooth of the species *Carcharodon Carcharias* (Great White) was found in the greatest concentration of bone. This was the only example of possible grave goods associated with the burial. No pit feature was noted, and no remains of a ceramic vessel were found with the burial.

After the burial was removed, the area was trowelled down to a depth of six inches, extending one foot on each side of the distribution of bone. This soil was subsequently screened through one-quarter-inch mesh and yielded a small number of bone fragments. Photographs were taken during the removal and the fragments were bagged according to preliminary identification.

The Practice of Cremation

Cremation, as a mortuary practice of aboriginal Americans, dates to the Early Archaic period. It is found in almost every native American culture to some degree, but was not widely practiced until the Woodland period (Martin, Quimby, Collier 1947). A search of the ethnographic literature regarding cremation, reveals various reasons why the practice was employed.

In the early 1700s, a Frenchman named Charlevoix toured the area around the Great Lakes and then continued on down the Mississippi. At that time the Missisauga, a tribe related to the Chippewa, lived on the shores of Lake Clair and the vicinity. Charlevoix saw their scaffold burials and referring to the tribes with whom he had come in contact, wrote:

> "When an Indian dies in the time of hunting, his body is exposed on a very high scaffold, where it remained till the departure of the company, who carry it with them to the village. There are some nations who have the same custom, with respect to all their dead; and I have seen it practiced among the Missaguez at the Narrows. The bodies of those killed in war are burnt, and the ashes carried back, in order to be deposited in the sepulcres of their ancestors" (Charlevoix 1761 in Yarrow 1879: 144).

Another reference to the burning of bodies is found in Radisson's account of his fourth voyage into the northern wilderness. He and his companions were joined in their trip by some Algonquian Indians from the vicinity of Lake Superior. They encountered a number of Iroquios, and in the ensuing battle, two of the Algonguians were killed. Radisson described what followed:

> "We bourned our comrades, being the custom to reduce such into ashes being slain in bataill. It is an honnour to give them such a burial" (Raddison 1885 in Bushnell 1920: 360.

A poignant account of the process of cremation was prepared in 1721 and shows that others, besides those killed in war, were also cremated.

> "An officer of the regular Troops has informed me also, that while he had the Command of the Garrison at Oswego, a Boy of one of the far Westward Nations died there; the Parents made a regular Pile of Split Wood, laid the corpse upon it, and burnt it; while the Pile was burning, they stood gravely looking on, without any Lamentations, but when it was burnt down, they gathered up the bones with many Tears, put them into a box, and carried them away with them" (Colden 1750 in Bushnell 1920: 38).

In his *Adventures on the Columbia River*, published in 1831, Ross Cox gives a version of the ritual as practiced by the Tolkotins of Oregon:

> "The ceremonies attending the dead are very singular, and quite peculiar to this tribe. The body of the deceased is kept nine days laid out in his lodge, and on the tenth it is buried. For this purpose a rising ground is selected, on which are laid a number of sticks, about 7 feet long, of cypress, neatly split, and in the interstices is placed a quantity of gummy wood. During these operations, invitations are dispatched to the natives of the neighboring villages requesting their attendance to the ceremony. When the preparations are perfected the corpse is placed on the pile, which is immediately ignited, and during the process of burning, the bystanders appear to be in a high state of merriment...After the process of burning the corpse is terminated, the widow collects the larger bones, which she rolls up in an envelope of birch bark, and which she is obliged to carry on her back for some years afterward...The ashes of her husband are then carefully collected and deposited in a grave" (Cox 1831 in Yarrow 1879: 144-146).

According to Stephen Powers, cremation was common among the Se-nel of California:

> "The dead were mostly burned...The corpse was that of a wealthy chieftan...When the torch was applied they set up a mournful din, chanting and dancing about him...Then the bright, swift flames, with their hot tongues licked this cold obstruction into chemic change, and the once delighted spirit of the savage was bourne up...toward the beautiful sun, to bask in its warmth

and light, and then to fly away to the Happy Western Land" (Powers 1887 in Yarrow 1879: 147).

Apparently, cremation was resorted to in many cases as a means of reducing the difficulty of removing the remains from the place of death to the locality where it was desired they might be deposited, but certain tribes attached some superstitious belief to the act of burning the bodies of their dead (Binford 1963: 96).

There are many arguments offered to account for variability in mortuary rites as practiced by different cultures. Regarding cremation, the two most commonly cited propositions are:

1. Cremation is associated with belief in an afterworld in the sky; burning the physical remains releases the soul which is then transported to the celestial afterworld via the ascending smoke (James 1928 in Binford 1963: 96).

2. Cremation is associated with extreme fear of the corpse and hence a desire to be done with it (Malinowski 1955 in Binford 1963: 98).

A myth given in Schoolcraft, which related to the Bonak Indians, explains the adoption of the practice in another way:

> "The first Indians that lived were coyotes. When one of their number died the body became full of little animals of spirits, as they thought them. After crawling over the body for a time they took all manner of shapes, some that of deer, others of elk, antelope, etc. It was discovered, however, that great numbers were taking wings and for a while they sailed about in the air, but eventually they would fly off to the moon. The old coyotes or Indians, fearing the worls would be depopulated in this way, concluded to stop it at once, and ordered that when one of their people died the body must be burnt. Ever after they continued to burn the bodies of deceased persons" (Schoolcraft 1854 in Yarrow 1879: 145).

To summarize, cremations tend to be associated with (1) superstition, (2) those killed in battle or in the time of hunting, (3) those who died away from home and were thus returned, (4) individuals of status within the tribe.

Descriptive Analysis

One thousand five hundred four bones and bone fragments were recovered from 38BU135. The identified remains include: 285 fragments of the cranium, 26 of the face, 2 teeth, 297 long bone fragments, 24 vertebral, 32 fragments of ribs, 99 of the hands and feet, and 1 clavicle. Unidentified fragments include 59 large fragments of cancellous bone tissue and 679 fragments too small for reliable identification.

The most direct evidence of burning is discoloration, and the recovered bone can be placed in three categories as defined by Baby (1954):

1. Calcined: Bone ranges from light grey, blue grey, to white in color, and may show deep "checking," transverse fracturing and warping.

2. Smoked: Bone is blackened in color from the incomplete combustion of organic materials present.

3. Unburned: Bone does not show the effects of burning.

With the exception of five phalanges, all bone recovered was either calcined or smoked. The phalanges mentioned are a light-tan color, which would indicate weathering rather than burning. The bone is generally in good condition and durable. Because the bone was found in sandy, well drained and aerated soil, the key factor in its preservation appears to be burning (Brooks et al. 1982: 21).

Minimum Number of Individuals

In order to determine the minimum number of individuals among the remains, it is necessary to identify the most frequently represented body part. This can be any bone or fragment which can be identified and sided (Bass 1971).

The minimum individual count will normally involve a bone not likely to disintegrate during firing. This can be due either to the density of the bone itself or its protected position in the skeleton. Such bones include the petrous portion of the temporal, the supra-orbital regions, and the odontoid process of the second cervical vertebra. If the bodies were burned elsewhere then placed in a secondary burial, as is the case of the remains from the Bluff site, the count is further limited to those bones likely to be collected and redeposited (Buikstra and Goldstein 1973: 16).

The most frequently identified and sided part of the skeleton recovered from 38BU135 is the petrous portion of the temporal. The remains contained eleven petrous portions, six right and five left. Thus the remains represent a minimum number of six individuals.

Condition of Bone Prior to Firing

Fracture patterns are useful in determining whether bone was fleshed (green), or defleshed (dry), prior to incineration. Experiments by Baby (1954) and Binford (1963) suggest that cremation of dried bones produce different fracture patterns than cremation of bones with flesh. Burning dry bones causes cracking or "checking" on the surface and longitudinal fracture lines, but no warping or twisting. Burning of "green" or fleshed bone creates curved, transverse fracture lines, irregular longitudinal splitting, and a marked warped or melted appearance (Ubelaker 1978: 35).

The calcined bone recovered from the Bluff site exhibits curved transverse fracture lines, irregular longitudinal splitting, and a warped, melted appearance. It would appear, therefore, that the individuals were burned or cremated in a fleshed condition.

Dismemberment Prior to Burning

Bones that are in articulation at the time of burning produce characteristic patterns of smoking and/or calcination. Portions of the joint surface that are protected by opposing bone will be less burned than the more exposed non-articular region. Abrupt changes from one degree of burning to another on a single bone may also indicate dismemberment. If the flesh has been pulled away from a mutilated joint, the unprotected articular area will be more heavily burned than the remainder of the bone (Buikstra and Goldstein 1973: 20; Brothwell 1972: 17).

The skeletal remains from 38BU135 exhibit several specific indicators that could point to dismemberment of the body prior to burning. On one long bone fragment there is a possible cut mark that could also be an indicator of dismemberment. However, the evidence of dismemberment is not constant throughout the remains. The position of the body relative to the fire could also produce many of the characteristics of dismemberment. Several episodes of cremation may be represented, with dismemberment being a factor in some and not in others (Buikstra and Goldstein 1973: 21).

Sex and Age Estimation

The identification of age and sex with cremated remains is a problem because the bones are usually very fragmented, and because the process of burning can produce changes in their sizes and shapes. The amount of shrinking observed during experimental firings ranged from one percent to twenty-five percent, depending on the temperature and duration of the fire (Van Vark 1970 in Ubelaker 1978: 36). No shrinkage occurred until the temperature reached 700 degrees C. There was a progression between 700 and 900 degrees C, but higher temperatures produced no further shrinkage, which is accompanied by changes in color, first to black or grey then to white. Accordingly, anyone identifying white fragments should allow for shrinkage up to 25 percent (Ubelaker 1978: 34). Shrinkage can markedly affect observations of rugosity and robusticity, which are used to determine sex and age. A decrease in size would render suspect standard metric measurements commonly used in biological distance studies.

Unfortunately, the important pelvic sections used in determining sex and age are among the first liable to disintegrate in the fire. This is the case with the remains of the Bluff site. Even endocranial suture is of little value here because crania tend to fragment along suture lines in all but the oldest individuals (Buikstra and Goldstein 1973: 17).

Among the fragmented remains there are few reliable indicators for sex and age estimation. A reconstructed mandible, which is two-thirds com-

plete, appears to be that of a male. The general robusticity, as well as the squared chin point to this conclusion. Recovered portions of the occipital have faint muscle ridges (nuchal crest) and the external occipital protuberence is not well defined. This would indicate that at least one individual was female (Bass 1971). A reconstructed distal end of the humerus shows the appearance of a pinpoint septal aperture, which according to Hrdlicka (1932: 431), appears more frequently in females.

Two teeth were recovered with the remains: a maxillary premolar and a mandibular molar. Only the crowns to these teeth survived incineration, and it is not possible to say whether these represent the same individual. Both teeth demonstrate very little wear, and the condition of the molar would indicate that one of the individuals was at least 18-21 years of age (Bass 1971).

Summary and Conclusions

Due to the absence of cultural/temporal indicators in the burial pit, the cremation would be potentially related to any of the aboriginal cultures represented at the Bluff site. Analysis of the charred remains disclosed that a minimum number of six individuals were interred, and all appear to have been burned in a fleshed state. The remains represent at least one male and one female. The sex of the remaining four individuals is undetermined. The age of one individual based on tooth morphology was, at a minimum, 18-21 years of age.

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APPENDIX B

A SUMMARY OF THE ARTIFACT ASSEMBLAGES FROM THE HISTORIC SITES RECORDED DURING THE DAUFUSKIE ISLAND ARCHEOLOGICAL SURVEY, DAUFUSKIE ISLAND, BEAUFORT COUNTY, SOUTH CAROLINA

Provenience	Cultural Materials
38BU153 (Haig's Point Plantation)	
38BU153G-2A (Test A, Level 1)	2 undecorated whiteware ceramics
	1 undecorated semi-porcelaineous stoneware
	1 clear, square-shoulderd bottle fragment
	1 cut nail with stamped head (3.25-3.50 in.)
	3 cut nail with stamped head (length indeterminable)
	3 cut nail fragments
	2 dark green bottle glass fragments
	28.0 grams of brick
38BU153G-2B (Test A, Level 2)	9 undecorated whiteware ceramics
	1 hand-painted polychrome whiteware bowl rim fragment
	2 annularware ceramics
	1 green glazed earthenware
	3 alkaline glazed stoneware
	1 annular semi-porcelaineous stoneware
	1 undecorated semi-porcelaineous stoneware
	8 medium to dark green bottle glass
	2 light green bottle glass fragments
	1 aqua, multi-faceted bottle glass
	1 pipe bowl fragment
	1 pipe stem fragment
	2 cut spikes with stamped heads (5.75-6.15 inches)
	1 cut spike with wrought head (fragment)
	1 cut spike (fragmentary)
	1 rivet
	1 cut nail with stamped head (3.50 inches)
	3 cut nails with stamped heads (2.50-3.00 inches)
	2 cut nails with stamped heads (2.25 inches)
	7 cut nails with stamped heads (1.25-1.75 inches)
	32 cut nails with stamped heads (fragments)
	30 cut nails with heads missing
	1 cut nail with apparent wrought head

Provenience	Cultural Materials
38BU153G-2B (Cont.)	1 wire nail
	2 wrought nails
	1 pointless wood screw
	1 metal clamp/spring fragment
	2 pot or kettle fragments
	1 chain fragment
	2 unidentifiable metal fragments
	1 metal wire
	1 metal button with missing post
	90.9 grams of brick
	3.5 grams of shell
	5.8 grams of tabby mortar
	3.9 grams of bone
	2.4 grams of coal/slag
	1 cordmarked fine to medium sand tempered prehistoric ceramic
	1 curvilinear complicated stamped fine to medium tempered prehistoric ceramic
	5 deteriorated decorated fine to medium sand tempered prehistoric ceramic
38BU153G-2C (Test A, Level 3)	1 cracked quartz cobble
	1 bone pin (2 pieces)
	4 Savannah cordmarked fine to medium tempered prehistoric ceramics with burnished interiors
	3 Savannah check stamped medium to coarse tempered prehistoric ceramics
	3 undecorated fine to medium tempered prehistoric ceramic with burnished surfaces
	1 undecorated grog tempered prehistoric ceramic
	1 deteriorated decorated coarse sand tempered prehistoric ceramic
	5.0 grams of bone
38BU153G-2D (Test A, Level 4)	2 cordmarked fine sand tempered prehistoric ceramic fragments with burnished interiors
38BU153G-2E (Test A, Level 5)	10 fabric impressed coarse tempered prehistoric ceramic fragments (all part of the same vessel).

Provenience	Cultural Materials
38BU153G-2F (Test A, Feature 1)	1 Savannah cordmarked prehistoric ceramic 1 deteriorated decorated grog tempered prehistoric ceramic fragment 1 undecorated fine sand tempered prehistoric ceramic with burnished exterior surface
38BU153G-3A (Test B, Level 1)	2 dark green bottle glass fragments 1 blue-green bottle glass fragment 3 brown bottle glass and neck fragments 1 blue bottle neck and top fragment 1 cut spike with stamped head (4.74 inches) 1 cut nail with stamped head (2.25 inches) 1 cut nail fragment 1 unidentifiable nail fragment 1 pipe stem fragment 2 metal tubing fragments 129.8 grams of tabby mortar 12.0 grams of brick 1 cordmarked fine to medium sand tempered prehistoric ceramic
38BU153G-3B (Test B, Level 2)	1 blue shell edged whiteware plate rim fragment 1 blue edged whiteware plate rim ceramic 1 polychrome pearlware ceramic 1 polychrome whiteware ceramic 1 lavender and white sprigged stoneware 1 dark green bottle glass 4 medium to light green bottle glass 1 aqua bottle glass 1 cut spike (5.25 inches) 2 cut nails with stamped heads (2.50 inches) 7 cut nails with stamped heads (indeterminate length) 5 cut nail fragments 1 pointless wood screw 3 pipe stem fragments 2 white milkglass, four-holed buttons 1 possible strike-a-lite 1 metal washer 3 wire fragments 1 unidentifiable metal fragment 1 rifle bullet casing

Provenience	Cultural Materials
38BU153G-3B (Cont.)	30.8 grams of bone
	83.1 grams of brick
	413.6 grams of mortar
	4 Savannah cordmarked prehistoric ceramics
	4 linear check stamped prehistoric ceramics
	5 fabric impressed prehistoric ceramics
	1 Savannah check stamped (?) prehistoric ceramic
	1 grog tempered prehistoric ceramic
	5 undecorated prehistoric ceramics with smoothed or burnished exterior surfaces
	8 deteriorated decorated or undecorated prehistoric ceramics
38BU153G-3C (Test B, Level 3)	1 brass thimble
	7.5 grams of tabby mortar
	5 Savannah (?) cordmarked prehistoric ceramics
	2 fabric impressed prehistoric ceramics with burnished interiors
	2 Savannah check stamped (?) prehistoric ceramics (badly eroded)
	1 linear checked stamped prehistoric ceramic
	4 undecorated prehistoric ceramics with burnished interiors
	9 deteriorated decorated or undecorated prehistoric ceramics
38BU153G-4A (Test C, Level 1)	1 undecorated ironstone-whiteware cup fragment
	1 polychrome whiteware bowl rim fragment
	2 whiteware plate base fragments
	2 undecorated ironstone ceramics
	1 purple transfer printed whiteware ceramic
	1 brown and white annularware
	1 underglazed blue porcelain ceramic
	2 dark green bottle base fragments
	4 medium green bottle glass
	1 medium green bottle neck fragment
	1 light, translucent green bottle base
	10 light, translucent green bottle glass
	1 dark green bottle neck
	4 light green bottle glass fragments
	1 blue-green bottle glass
	6 blue bottle fragments (1 has embossing)
	8 aqua, panel pharmaceutical bottle fragments with embossed letters

Provenience	Cultural Materials
38BU153G-4A (Cont.)	3 aqua, multi-faceted glass fragments
	1 octagonal tableware glass
	1 multi-sided, clear glass fragment
	1 brown bottle base fragment
	3 cut nails with stamped heads (2.50-3.00 inches)
	5 cut nails with stamped heads (2.00-2.75 inches)
	3 cut nails with stamped heads (1.50 inches)
	13 fragmentary cut nails with stamped heads
	13 fragmentary cut nails with no heads or heads broken
	1 cut spike
	3 unidentifiable metal fragments
	1 perforated stove grate (?)
	1 wire fragment
	2 pipe stems
	14.6 grams of bone
	458.8 grams of tabby mortar
	493.0 grams of brick
	1 cordmarked, fine sand tempered prehistoric ceramic
38BU153G-4B (Test C, Level 2)	4 blue and white annularware ceramics
	1 undecorated ironstone-whiteware
	1 undecorated whiteware mug base
	1 undecorated whiteware ceramic
	1 blue transfer-printed whiteware
	1 polychrome pearlware plate base fragment
	1 undecorated pearlware ceramic
	1 burned annularware ceramic
	1 yellow earthenware
	1 brown stoneware
	1 yellow interior, red paste earthenware
	3 medium green bottle glass fragments
	1 olive green bottle glass
	4 brown bottle glass fragments (1 with embossing) (1 vessel)
	1 aqua bottle glass
	1 window glass
	3 pipe stem fragments

Provenience	Cultural Materials
38BU153G-4B	1 cut nail with stamped head (3.75 inches)
	5 cut nails with stamped heads (2.50-3.25 inches)
	2 cut nails with stamped heads (2.0 inches)
	2 cut nails with stamped heads (1.25-1.50 inches)
	2 cut nails with stamped heads and sheared ends (1.00-2.00 inches)
	6 cut nails with stamped heads (fragments)
	5 fragmentary cut nails with heads missing
	1 wrought spike (3.0 inches)
	1 cut nail with wrought head
	1 metal spoon
	1 metal corner band
	848.0 grams of brick
	336.0 grams of tabby mortar
	67.4 grams of food bone
	3 overstamped, cordmarked prehistoric ceramics
38BU153G-4C (Test C, Level 3)	1 blue and white annularware ceramic
	2 annularware ceramics
	1 green glazed stoneware
	1 medium to dark green bottle glass
	8 cut nails with stamped heads (2.75-3.25 inches)
	4 cut nails with stamped heads (1.50-2.00 inches)
	6 cut nails with stamped heads (indeterminate length)
	6 fragmentary cut nails
	2 cut spikes
	1 pipe stem fragment
	125.2 grams of brick
	205.6 grams of tabby mortar
	241.6 grams of long bone (with butcher marks)
	49.6 grams of food bone
	2 cordmarked medium to coarse sand tempered prehistoric ceramics
	1 cordmarked, grog tempered prehistoric ceramic
	2 deteriorated decorated prehistoric ceramics
	3 undecorated medium to coarse sand tempered prehistoric ceramics

Provenience	Cultural Materials
38BU153G-4D (Test C, Level 4)	1 blue edged whiteware plate fragment 1 undecorated whiteware ceramic 1 burned stoneware 1 medium green bottle glass fragment 1 cut nail with stamped head (3.00 inches) 4 cut nails with stamped heads (2.00-2.25 inches) 2 cut nails with stamped heads (1.50-1.75 inches 4 fragmentary cut nails 2 possible wrought nails 1 "hinge-like" metal rod and flat sheeting 159.4 grams of tabby mortar 46.8 grams of food bone
38BU153G-4E (Test C, Level 5)	1 milkglass ceramic fragment 1 pipe stem fragment 2 cut nails with stamped heads (1.75-2.0 inches) 1 cut nail with stamped head (indeterminate length) 1 fragmentary cut nail 1 unidentifiable iron concretion 9.9 grams of food bone 1 burnished fine to medium sand tempered prehistoric ceramic 1 deteriorated decorated fine to medium sand tempered prehistoric ceramic
38BU153G-4F (Test C, Level 6)	5 cordmarked fine to medium sand tempered prehistoric ceramics
38BU153M-1 (Tabby M, Surface)	1 possible Westerwald stoneware 1 undecorated ironstone rim fragment 1 blue edged whiteware 2 blue edged whiteware with sprigged border 1 pearlware cup handle 1 undecorated pearlware 1 finger painted mocha ware 1 brown stoneware 1 medium green bottle glass

Provenience	Cultural Materials
38BU153N-6 (Test Area B, Post Hole 6)	1 brown stoneware 1 undecorated pearlware cup fragment 29.7 grams of shell
38BU153N-7 (Test Area B, Post Hole 7)	1 deteriorated decorated prehistoric ceramic 2.9 grams of shell
38BU153N-11 (Test Area B, Post Hole 11)	1 corroded nail fragment
38BU153N-15 (Test Area B, Post Hole 15)	1 Westerwald stoneware
38BU153N-16 (Test Area B, Post Hole 16)	1 brown stoneware 10.0 grams of shell
38BU153N-25 (Test area B, Post Hole 25)	23.4 grams of shell
38BU153N-37 (Test Area B, Post Hole 37)	16.7 grams of mortar
38BU153N-39 (Test Area B, Post Hole 39)	58.0 grams of mortar
38BU153N-51 (Test Area B, Post Hole 51)	1 creamware fragment
38BU153N-53 (Test Area B, Post Hole 53)	1 medium green bottle glass

Provenience	Cultural Materials
38BU1530-1 (Test Area C, Post Hole 1)	1 undecorated ironstone plate base fragment 1 pipe stem
38BU1530-3 (Test Area C, Post Hole 3)	1 cut nail fragment
38BU1530-5 (Test Area C, Post Hole 5)	1 unidentifiable metal fragment 1 unidentifiable nail fragment 1 wire nail (2.0 inches) 1.9 grams of food bone
38BU1530-6 (Test Area C, Post Hole 6)	1 light green bottle glass fragment 4.0 grams of brick
38BU1530-7 (Test Area C, Post Hole 7)	1 cut spike with stamped head (6.0 inches) 2 kaolin pipe stems
38BU1530-8 (Test Area C, Post Hole 8)	1 cut nail fragment
38BU1530-10 (Test area C Post Hole 10)	1 overglazed enamelled porcelain ceramic 3.2 grams of brick
38BU1530-12 (Test Area C, Post Hole 12)	1 annularware ceramic 1 red transfer-printed whiteware 1 clear, heavy drinking glass fragment 0.5 grams of food bone 4.0 grams of brick
38BU1530-13 (Test Area C, Post Hole 13)	32.4 grams of brick

Provenience	Cultural Materials
38BU584 (Lower House Site)	
38BU584-1 (Test Unit 1)	1 unidentifiable nail fragment 37.3 grams of mortar 57.0 grams of brick 28.4 grams of shell
	2 Savannah check stamped prehistoric ceramics 1 Savannah cordmarked prehistoric ceramic 1 cordmarked prehistoric ceramic
38BU584-2 (Test Unit 2)	3 fine cordmarked (Savannah ?) prehistoric ceramic fragment 1 curvilinear complicated stamped rim sherd 2 burnished, plain prehistoric ceramics 1 deteriorated decorated prehistoric ceramic 1 pipe stem fragment 6.0 grams of shell
38BU584-3 (Test Unit 3)	1 light blue glass fragment 1 cut nail fragment 41.7 grams of tabby mortar 10.6 grams of shell
	1 burnished prehistoric rim sherd 1 smoothed prehistoric ceramic 3 cordmark prehistoric ceramics 3 undecorated prehistoric ceramics 1 undecorated grog tempered prehistoric ceramic
38BU584-4 (Test Unit 4)	3 undecorated, burnished prehistoric ceramics (probable Irene) 1 undecorated prehistoric ceramic 1 cordmarked prehistoric ceramic 3 deteriorated decorated prehistoric ceramics 1 small whelk shell
38BU584-5 (Test Unit 5)	4 Savannah (?) fine cordmarked prehistoric ceramics with burnished interiors
38BU584-6 (Test Unit 6)	1 green glass fragment 2 undecorated, burnished prehistoric ceramic 4 cordmarked prehistoric ceramics 4 undecorated prehistoric ceramics

Provenience	Cultural Materials
38BU584-7	40.6 grams of shell
(Test Unit 7)	1 burnished prehistoric ceramic fragment
	1 deteriorated decorated prehistoric ceramic
	1 linear check stamped prehistoric ceramic
38BU584-8	2 overstamped cordmarked prehistoric ceramics
(Test Unit 8)	1 fine cordmarked prehistoric ceramic
	1 deteriorated decorated prehistoric ceramic
	1 undecorated prehistoric ceramic
	1 burnished prehistoric ceramic
38BU584-9	1 clam shell fragment
(Test Unit 9)	1 undecorated fine sand tempered prehistoric ceramic
38BU584-10	1 highly smoothed to burnished undecorated prehistoric ceramic
(Test Unit 10)	2 deteriorated decorated prehistoric ceramics
38BU584-12	2 Savannah (?) fine cordmarked prehistoric ceramics
(Test Unit 12)	2 undecorated prehistoric ceramics
	2 deteriorated decorated prehistoric ceramics
	3.7 grams of bone
	29.8 grams of shell
38BU584-13	1 deteriorated decorated prehistoric ceramic
(Test Unit 13)	
38BU584-14	1 green edged ironstone-whiteware
(Test Unit 14)	98.4 grams of mortar
	39.8 grams of brick
38BU591 (Haig's Point Lighthouse)	
38BU591A-2A	3 undecorated earthenware ceramics
(Test 1, Level A)	1 blue transfer-printed stoneware
	3 undecorated porcelain ceramics

Provenience	Cultural Materials
38BU591A-2A (Cont.)	1 brown bottle glass fragment
	2 window glass fragments
	6 molten glass fragments
	2 manganese glass fragments
	2 manganese pressed glass fragments
	2 thin, clear glass fragments
	2 thick, clear curved glass fragments
	1 shell (?) four-holed button
	1 bone tableware handle fragment
	1 cut nail with stamped head (3.25 inches)
	7 cut nails with stamped heads (2.50 inches)
	10 cut nails with stamped heads (1.75-2.00 inches)
	3 cut nails with stamped heads (1.50-1.75 inches)
	4 cut nails with stamped heads (1.00 inches)
	30 cut nails with stamped heads (indeterminant length)
	19 fragmented cut nails
	3 cut spikes
	1 wire nail (3.0 inches)
	6 wire nails (2.0 inches)
	2 wire nails (1.50-1.75 inches)
	6 wire nails (1.00-1.25 inches)
	4 finishing nails (0.75-1.25 inches)
	3 furniture tacks
	2 rivets
	43 unidentifiable cut or wire nails
	1 staple
	1 "V" shaped metal object
	6 shotgun and rifle bullets
	1 undergarment strap attachment
	1 metal lock washer
	1 metal ring fragment
	41.4 grams of brick
	4.5 grams of food bone
38BU591A-2B (Test 1, Level B)	3 cut nails with stamped heads (3.00-3.25 inches)
	9 cut nail fragments
	1 cut nail with stamped head (2.00 inches)
	3 cut nails with stamped heads (1.00-1.75 inches)
	1 wire nail

Provenience	Cultural Materials
38BU591A-2B (Cont.)	1 large "eyehook" fragment 537.2 grams of tabby and mortar
38BU591A-2C (Test 1, Level C)	3 cut nails with stamped heads 5 heavily corroded cut nails
38BU591C-2B (Privy Test, Level B)	1 Philadelphia oval pharmaceutical bottle 1 aqua, oil panel pharmaceutical bottle with embossed lettering 1 brown, French square pharmaceutical bottle with bead lip 1 small, clear rectangular panel bottle 1 polychrome transfer-printed chamber pot (17 pieces) 1 polychrome, floral pattern, transfer-printed porcelain cup 1 polychrome, floral pattern, transfer-printed ironstone cup fragment 1 undecorated earthenware cup with French maker's mark 1 polychrome, floral pattern, transfer-printed porcelain plate fragment 1 undecorated, porcelain jewelry hand 2 undecorated whiteware ceramic fragments 1 window glass 1 cut nail 1 wire nail 1 cut spike 1 Lincoln penny (1948) 1 metal pipe ring quard 1 mortar/plaster fragment 4 furniture leg fragments 3 deer long bones 3 lamp chimney glass fragments 128.0 grams of food bone
38BU591C-2D (Privy Test, Level D)	1 polychrome whiteware ceramic 1 lead ball with center hole 20.8 grams of mortar 12.4 grams of brick 8.7 grams of food bone

Provenience	Cultural Materials
38BU591C-2E (Privy Test, Level E)	8 frosted lamp chimney fragments 3 clear lamp chimney fragments 1 milkglass four-holed button 1 unidentifiable metal object 14.0 grams of mortar 31.5 grams of brick 8.5 grams of bone
38BU593 (Cooper River Landing)	
38BU593-1 (General Surface)	1 British brown stoneware 1 brown stoneware 2 blue shell edged pearlware 1 feldspathic glazed stoneware 4 dark green bottle glass bases 3 dark green bottle neck fragments 3 dark green bottle fragments 1 clear bottle base 2 cracked rock fragments 1 metal hatchet head (highly deteriorated) Human Remains 1 femur fragment 1 humerus fragment 1 head of humerus 3 cranial fragments 1 unidentifiable fragment 1 illium fragment (with sciatic notch)
38BU594- (Dock Site)	
38BU594-1 (General Surface)	2 dark green bottle necks 7 dark green bottle bases 13 dark green bottle glass fragments 1 clear bottle base fragment 1 lead glazed earthenware 1 annular pearlware 1 transfer-printed whiteware 1 stoneware with albany slop 1 chert cobble fragment 1 unidentifiable prehistoric ceramic
38BU620 (Webb Site)	
38BU620A-2 (Tabby Locus, Test 1)	3 cut nails with stamped heads (indeterminant length) 48.7 grams of mortar

Provenience	Cultural Materials
38BU620B-2 (Midden at Locus B, Test 1)	4 light to medium green bottle glass fragments 2 opaque light to medium green bottle glass fragments 1 medium, green, flat sided bottle glass fragment 1 light green bottle glass fragment 3 clear bottle glass fragments 1 blue-green "Ryan" bottle with embossing 1 aqua pharmaceutical bottle top fragment 1 undecorated ironstone-whiteware 1 red bodied earthenware with yellow slipped interior 160.0 grams of brick
38BU620E-2 (Midden at Locus E, Test 1)	2 medium to dark green bottle glass fragments
38BU620F-3 (Area adjacent to midden at Locus F, Test 2)	1 Westerwald saltglazed stoneware 2 undecorated ironstone-whiteware 1 medium green bottle glass 1 wrought nail (3.0 inches)
38BU625 (Scouten Site)	
38BU625-2 (Test Unit 1)	1 clear glass fragment (possible lamp chimney) 1 light to medium green bottle glass 1 wire nail 24.8 grams of mortar
38BU625-3 (Test Unit 2)	1 light green bottle neck fragment 2 light green bottle glass fragments 2 cut nail fragments 1 threaded machinist bolt 34.3 grams of brick 10.6 grams of mortar 31.4 grams of shell
38BU625-5 (Test Unit 4)	1 cut nail with stamped head (1.50 inches) 0.8 grams of mortar
38BU625-6 (Test Unit 5)	1 unidentifiable metal object 1 tar shingle fragment

Provenience	Cultural Materials
38BU625-7 (Test Unit 6)	1 tar shingle fragment
38BU625-8 (Test Unit 7)	1 unidentifiable metal object
38BU625-9 (Test Unit 8)	1 cut nail with stamped head (fragment)
38BU625-10 (Test Unit 9)	1 medium green bottle glass 1 window glass 1 wire nail 1 tar shingle 1.3 grams of bone
38BU625-11 (Test Unit 10)	1 aqua bottle glass fragment 1 undecorated whiteware fragment 1 light green bottle glass
38BU625-12 (Test Unit 11)	1 clear tumbler fragment 1 cut nail with stamped head 1 wire tack 1.6 grams of bone 7.4 grams of brick
38BU625-13 (Test Unit 12)	1 unidentifiable nail fragment 2 window glass
38BU625-14 (Test Unit 13)	1 polychrome hand painted whiteware 2 manganese glass fragments 39.7 grams of brick
38BU625-15 (Test Unit 14)	1 brown stamped stoneware 1 cut nail (unidentifiable) 2 tar shingle fragments
38BU625-16 (Test Unit 15)	1 fragmentary cut nail 1 aqua bottle glass fragment 1 cut nail with stamped head

Provenience	Cultural Materials
38BU625-17 (Test Unit 16)	1 medium green bottle neck fragment 3 thick, flat green glass 1 cut nail with stamped head 1 wire nail with a washer 1 flat tin allow metal fragment has raised decoration (possible "pie-safe" door panel fragment 4 tar shingle fragments 27.6 grams of mortar
38BU625-18 (Test Unit 17)	1 Philadelphia oval pharmaceutical bottle base 1 clear bottle glass fragment 1 aqua bottle glass fragment 4 window glass 2 wire nails 1 electrical wire with terminal 1 tar shingle fragment
38BU625-19 (Test Unit 18)	1 window glass fragment
38BU625-20 (Test Unit 19)	1 overglazed enamelled porcelain bowl or saucer base fragment 1 aqua bottle glass 2 window glass fragments 2 fragmentary cut nails with stamped heads
38BU625-21 (Test Unit 20)	1 light green bottle glass 1 manganese bottle glass 2 clear bottle glass 1 window glass 1 lead ball or shot 5.6 grams of brick
38BU625-22 (Test Unit 21)	1 clear bottle glass 2 window glass 2 fragmentary cut nails 1 wire nail
38BU625-23 (Test Unit 22)	7 window glass fragments 7 slate roofing fragments 1 cut nail with stamped head 1 sprigged pipe bowl fragment

Provenience	Cultural Materials
38BU625-24 (Test Unit 23)	1 window glass
38BU625-25 (Test Unit 24)	1 clear glass fragment 1 cut nail with stamped head 1 cut nail fragment
38BU625-26 (Test Unit 25)	1 brown stoneware 1 dark green bottle glass 3 window glass 0.7 grams of brick
38BU625-27 (Test Unit 26)	1 cut nail with stamped head 22 window glass 3.7 grams of mortar
38BU625-28 (Test Unit 27)	1 shotgun shell fragment 1 corroded nail fragment 2 unidentifiable metal objects 1 undecorated prehistoric ceramic
38BU625-29 (Test Unit 28)	1 undecorated ironstone-whiteware 2 dark green bottle glass fragments 2 aqua bottle glass fragments 1 window glass 1 cut nail fragment 2.6 grams of bone
38BU625-31 (Test Unit 30)	1 dark green bottle glass 1 wire nail 29.0 grams of brick 2.3 grams of mortar
38BU625-32 (Test Unit 31)	1 window glass fragment 1 red bodied earthenware 1 brass ring 1 brass weight (clock part) 1 unidentifiable metal object 7.0 grams of mortar 1.2 grams of bone
38BU625-33 (Test Unit 32)	1 medium green bottle glass 46.8 grams of mortar

Provenience	Cultural Materials
38BU625-34 (Test Unit 33)	1 medium to dark green bottle glass 1 clear bottle glass 1 window glass 1 cut nail fragment 2 wire nails 9.8 grams of brick
38BU625-35 (Test Unit 34)	1 medium green bottle glass fragment 1 tar shingle fragment
38BU625-36 (Test Unit 35)	1 manganese glass bottle base 1 light green bottle glass fragment 1 window glass 1 cut nail with stamped head 2 wire tacks 73.4 grams of brick
38BU625-37 (Test Unit 36)	1 cut nail with stamped head 1 clear bottle glass fragment 1 window glass 0.4 grams of brick
38BU628 (Woodward Site)	
38BU628A-2 (Structural remains at Locus A, Test 1)	5 cut nails with stamped heads (indeterminant length) 1 unidentifiable metal object 0.25 grams of bone 14.2 grams of mortar
38BU628B-2 (Midden at Locus B, Test 1)	1 cut nail with stamped head 1 kaolin pipe bowl and stem fragment
38BU630 (Historic Middens Site)	
38BU630A-2 (Midden A, Test 1)	1 cut nail with stamped head (3.0 inches) 1 cut nail (fragmented and corroded) 1 chert strike-a-lite 11.3 grams of bone

Provenience	Cultural Materials
38BU630B-2 (Midden B, Test 1)	1 cut nail with stamped head (3.75 inches) 1 cut nail with stamped head (fragment) 1.7 grams of bone 12.7 grams of brick 5.8 grams of mortar
38BU630D-2 (Midden D, Test 1)	1 annularware ceramic 1 kaolin pipe stem fragment 15.4 grams of brick 13.2 grams of mortar
38BU634 (South Tabby Site)	
38BU634A-3 (Tabby A, Test 2)	1 transfer printed pearlware ceramic 1 pipe bowl fragment 1 pipe stem fragment 2 fragmentary cut nails
38BU634B-1 (Midden B at Tabby A general surface)	2 dark green bottle base fragments from the same bottle